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The educational leader portfolio: the reliability of portfolios as documentation of mastery of Isllc standards and functions

Cynthia Lynn Halstead Bowen

THE EDUCATIONAL LEADER PORTFOLIO: THE RELIABILITY OF PORTFOLIOS AS DOCUMENTATION OF MASTERY OF ISLLC STANDARDS AND FUNCTIONS

By

Cynthia Lynn Halstead Bowen

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Approved:

Thomas J. McCormack Professor of Educational Leadership (Committee Chair)	Michael D. Richardson Professor of Educational Leadership (Committee Member)
Camille L. Bryant Associate Professor of Foundations (Methodologist)	

Name: Cynthia Lynn Halstead Bowen

Previous degrees: Ed. S. Columbus State University, 2008, (Educational Leadership);
M. Ed. LaGrange College, 2006, (Curriculum and Leadership);
B. A. LaGrange College, 1985, (Middle Childhood Education);
A. S. Andrew College, 1983, (General Science)

Date of Current Degree: May 12, 2014

Institution: Columbus State University

Major Field: Educational Leadership

Major Professor: Dr. Thomas McCormack

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Candidate for Degree of Doctor of Education

This mixed-methods study explores the reliability of portfolios as evidence of mastery of the Interstate School Leaders Licensure Consortium (ISLLC) leader standards. The quantitative portion of the study was conducted to determine to what extent are portfolios reliable as evidence of mastery of ISLLC standards and functions of students enrolled in educational leadership specialist programs when measured by intra-class correlation. The qualitative portion of the study was to explore why consistency or inconsistency existed among the portfolio raters. Many colleges and universities utilize portfolios as performance-based assessments to measure growth of educational leadership students. The results of this study are provided as evidence of what is working and what is not working in regard to the utilization of portfolios as evidence of leader skill mastery.

The two-phase sequential mixed-methods study was used. Portfolios from two cohorts of educational specialist students were rated (N=30) using a six-point Likert-type scale at the function and standard levels. Three raters from a pool of nine were randomly assigned to each of the thirty portfolios, so that each of the nine raters evaluated between six and nine portfolios, and that each portfolio was evaluated by three of the nine raters. After establishing normal distribution of ratings, the data were evaluated through intra-class correlation to determine agreement of the raters regarding standards mastery for each of the ISLLC functions. The intra-class correlation coefficients ranged from -.257 to .626 at the function level and from 105 to .521 at the standard level. Although no agreement was found at the function or standard level, five themes which were supported by prior research emerged from the qualitative data provided by raters. Weak artifacts, confusing or unclear artifacts, misplaced or incorrectly aligned artifacts, incomplete artifacts, and implied artifacts contributed to discrepancies in scores earned by participants in the Educational Leadership Specialist program. Poor reflections lowered scores portfolios earned. Some raters gave credit for characteristics while others did not. A number of raters gave full credit for all functions in a standard if some of the functions were met, while other raters gave credit only for functions which were explicitly represented. Raters also lacked agreement regarding quality of particular artifacts. All of these issues led to poor consensus among the raters of these portfolios. In conclusion, students who participate in performance-based programs which required a portfolio to document the action component need to be well-trained on the purpose of the portfolio and how to create its components. Additionally, students enrolled in Ed. S. Leadership programs need to internalize the importance of reflection, as it is a practice which will

assist them in creating a high-quality portfolio. Finally, extensive rater training and practice is essential to reliably scoring educational leadership portfolios.

DEDICATION

Without God's grace and mercy, this task would never have been accomplished. I dedicate this work and any opportunities which may follow to Him.

I also dedicate this research to my dad, J. David Halstead. Although his only college degree was from the University of Hard Knocks, he found a way to help my mom, my two brothers, and me to earn at least Bachelor's degrees. Hey, Dad, we finally have a doctor in the house.

ACKNOWLEDGEMENTS

Heartfelt appreciation goes to Mike, my brave husband and cheerleader. His patience, encouragement, chef's hat, and love have sustained me through one of the most challenging tasks I have ever embraced. He brought me thousands of cups of coffee and endured many frozen pizzas in order for me to pursue my dream. I love you.

My mom has inspired me throughout this entire journey. I almost think her name should be next to mine on the diploma. Her red pen made my papers bleed, and then she bought the Blizzards to anesthetize the pain. She truly knew when to push, when to pull, and when to stand next to me and hold my hand.

Special thanks to my Dissertation Chair, Dr. McCormack. He encouraged me with quiet, peaceful words when I felt frustration beyond belief with this dissertation. I saved the email he sent with three powerful words-- "Hang in there." It was perfectly timed, perfectly delivered. I appreciate his willingness to take me on as a project when my original chair retired. Thank you for helping me to recruit others to join us. Dr. Bryant has been amazing. She never flinched as she tried to teach twenty rowdy, restless teachers how to perform statistical feats after long days with rowdy, restless children. She was willing to guide me through the statistical landmine of this study as I worked through the quantitative and qualitative portions of this work. She was even available on holidays and weekends, with her sweet little infant in tow. Although Dr. Richardson joined us late in the study, I appreciated his sense of humor as well as his high expectations for this program.

Do all things as unto God, a worker who does not need to be ashamed.

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CHAPTER I

INTRODUCTION

Background of the Problem

In an effort to answer criticisms about educational leadership preparation (Levine, 2005, & Brady, 2003) leaders in state departments of education and institutions of higher learning began to seek ways to reform and restructure educational leadership training. In 2008, significant changes took place in the structure and focus of Georgia's educational leadership certification. Partially, in response to the No Child Left Behind Act of 2001 and partially with a focus on fiscal responsibility, the Georgia Professional Standards Commission and other stakeholders launched new educational leadership certification routes which focused on Performance-Based preparation for those desiring to enter leadership roles in Georgia's public schools and school district offices. The new certification programs were designed to train educational leaders with a balance of practical on-the-job training and best-practices research skills. One key element in the restructured certification process was that those tapped for educational leadership positions had to enter leadership positions prior to entering university educational leadership programs and had to be actively mentored by personnel already in leadership positions throughout the duration of their university degree pursuits (Georgia Professional Standards, 2012).

According to the Georgia Professional Standards Commission, while candidates worked on a Specialist or Doctoral degree, they had to be engaged in activities that

allowed them to develop a wide range of skills with as many different stakeholders as possible (Georgia Professional Standards, 2012). Training which the candidates received had to show that they were challenged with a variety of leadership opportunities that were intentionally selected to develop a substantial skill set so that the emergent leaders would be prepared through practical opportunities to synthesize the theories they learned in the university setting, hence a performance-based structure. These residency requirements had to be collaboratively selected by school districts, building level leaders, and the institutions from which they sought degrees and had to be designed to give the emergent leader real opportunities to develop leadership functions and dispositions outlined by the Educational Leadership Constituent Council, the National Council for the Accreditation of Teacher Education, the Interstate School Leaders Licensure Consortium (ISLLC) and the Guidelines for Georgia Performance-Based Educational Leadership Program (Georgia Professional Standards, 2012). Each candidate had to have an individualized program, but all of the skills and standards for educational leaders had to be developed within the framework of their residency.

Documentation of the Education Leadership residency was tracked primarily through the utilization of portfolios, either electronic or paper. More than 90% of educational administration programs utilized portfolios according to a 2004 national study (Norton). Marzano (2000) suggested that portfolios were one of many types of performance assessments which captured more of an essence of what a learner actually knew. Reflections written in the portfolios were a valuable part of the portfolio process because thinking about learning established even deeper cognitive development (Schulman, 1998).

Statement of the Problem

Educational leadership programs moved toward a performance-based structure more than five years ago. Some sort of internship or practical experience was required to receive specialist degrees. Most universities utilize portfolios or electronic portfolios to document these practical internship experiences. Several years have passed since the requirement of performance-based activities, internships, and practical experience; principals and other mentors have had opportunity to apply the new requirements for leader candidates. Many portfolios were created to document leadership tasks, roles, and activities. However, what is not known is how well portfolios documented the mastery of leadership skills. Therefore, the researcher purposed to answer the overarching quantitative question: To what extent are portfolios reliable as evidence of mastery of ISLLC standards and functions of students enrolled in educational leadership specialist programs when measured by intra-class correlation? A secondary qualitative question was: Why does consistency or inconsistency exist among the raters?

Purpose of the Study

The researcher purposed to determine the reliability of portfolios as evidence of mastery of ISLLC standards and functions of students enrolled in an educational leadership program. Intra-class correlation was utilized to compare ratings assigned by those with advanced degrees in educational leadership when evaluating evidence of ISLLC standards and functions in portfolios presented by educational leadership students, thus determining reliability of the portfolios. From a pool of nine raters, each of thirty portfolios was evaluated by three raters to determine reliability. Those raters were asked

to explain why ratings were given and ways to improve evidence of skill mastery. Rater commentary was considered narrative or written interview. After the numerical data were gathered, the written narratives were coded and grouped to provide insight into the reliability of portfolios as documentation of leadership skill practice and mastery. The quantitative component of the study was designed to determine to what extent raters would evaluate portfolios similarly, and the qualitative element of the study was to offer explanation, justification, and rationalization of those scores. The ultimate goal was to gain practical, applicable understanding to the utilization of portfolios as a tool to ascertain mastery of ISLLC standards and functions.

Conceptual Framework

As background and foundational research, evolution of leadership preparation was examined. Additionally, ISLLC standards and functions were studied in order to build an understanding of theory behind the standards. The researcher also briefly delved into various leadership training programs. Utilization of authentic, performance-based assessment in university programs was another focus, especially when documentation of assessments was through portfolios and e-portfolios. The importance of adequate and appropriate artifacts along with their introductions and reflections was another component of study for the researcher.

The major conceptual framework for this study was drawn from various research relating to performance-based documentation of skills mastery. Marzano, Pickering, and McTighe suggested that performance tasks and assessments deepen student construction of their own learning (1993). Davis, Darling-Hammond, Meyerson, and LaPointe (2005) revealed in their research that programs with standards-based curriculum and field-based

internships prepared effective leaders. The researcher sought to determine reliability of the portfolios of artifacts created in performance-based and field-based assignments as documentation of mastery of educational leadership standards.

Although extensive explorations were made searching for evidence of reliability of portfolios for documentation of mastery of ISLLC standards and functions at an educational leadership specialist level, little research surfaced. Few studies have been conducted specifically for education leadership specialist programs in spite of the widespread use of portfolios as documentation of performance-based courses of study in those programs. Figure 1.1 depicts the conceptual framework of this study.

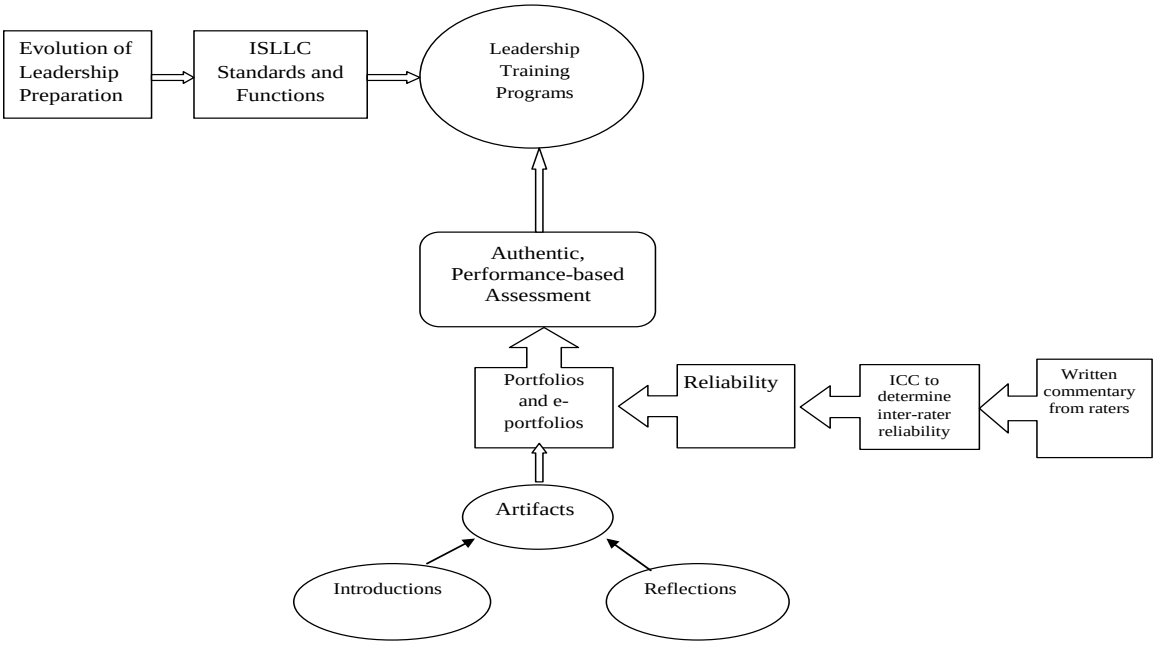


Figure 1.1 Dissertation conceptual framework

Importance of the Study

This study was of benefit to this mid-sized university in the Southeast United States and other institutes of higher learning because most universities utilize e-portfolios in some capacity to measure student growth. Reliability is a basic component of statistical data collection, and establishing the reliability of the use of one of the cornerstone pieces of evidence of leadership preparedness is necessary to include it in best-practices techniques. Portfolio reliability has been debated, but little evidence has been published regarding the reliability of electronic portfolio utilization in educational leadership programs. In fact, Markham and Hurst suggested that since the advent of the electronic platform, "the implications for reliability and validity appears not to have been subjected to research" (2009, p. 11). One of the potential benefits of this study was that it would help those who design educational leadership programs understand what was working and what was not working with regard to portfolio documentation of the ISLLC standards for aspiring educational leaders. A final potential benefit was to students who participate in Educational Specialist in Leadership programs. They would profit from preparing a purposeful portfolio from a program which had a reliable and valid assessment process of the performance-based component of their program of study.

Limitations of the Study

The portfolios utilized in this study were limited to those submitted by students who had completed this mid-sized university in the Southeast United States' Education Leadership Specialist program of study in any semester of 2011-2012. Raters were recruited from professors at this mid-sized university in the Southeast United States and

from school leaders who had earned Doctor of Philosophy in Educational Leadership or Doctor of Education in Educational Leadership degrees. Thirty portfolios were examined. Because this study was limited to a few portfolios in one university, it may not be generalizable to the entire population of education leadership candidates. However, by limiting the study to one program, variables of university Educational Leadership framework and coursework were eliminated. All students had the same criteria for entering the Education Specialist program. Although they may have been from different cohorts, many attended the same classes taught by the same professors. Expectations for portfolio documentation were similar for all students, and the raters were familiar with the ISLLC standards for Educational Leadership. Raters were limited to professors of educational leadership at this mid-sized university in the RSU or individuals with earned doctorates (either Ph. D. or Ed. D.) in the field of educational leadership and were working as educational leaders. These criteria ensured that raters had in-depth familiarity with the ISLLC standards so that they could appropriately determine to what extent artifacts (with their introductions and reflections, if included) provided evidence of mastery of particular standards and functions.

Delimitations of the Study

Because of the size of the university (mid-sized), the researcher had access to university personnel to recruit as raters. Additionally, because the school system in which the researcher works was midsized and many personnel in the system were acquainted with each other, a delimitation of this study was access to school building and district leaders as potential raters. A final delimitation was the provision of access to archived data by the university.

Definition of Key Terms

Administrators - building principals and others in leadership roles who provide instructional leadership or manage the daily activities in schools.

Authentic assessment - when student learning is applied in a complex, real-world situation and assessment in more than an event for a grade (Benson & Barnett, 2005).

Composite score - total of all function scores within a particular standard.

Comprehensive score - total of all standard scores; the total score of a portfolio.

Effective school - a school that meets the district's mission and vision for students.

Evaluation - the identification, clarification, and application of defensible criteria to determine an evaluation object's value (worth or merit), quality, utility, effectiveness, significance in relation to those criteria (Worthern, Sanders, &Fitzpatrick, 1998, p. 517).

Function- descriptor of tasks related to each ISLLC standard

Interstate School Leader Licensure Consortium (ISLLC) - The Interstate School Leaders Licensure Consortium (ISLLC) is a representative body of most of the major stakeholders in educational leadership including national associations, states, and colleges and universities. The ISLLC was organized by the Council of Chief State School Officers (CCSSO) and was formed for the purpose of developing model standards for school leaders (Hale and Moorman, 2003).

Mentoring relationships - close working relationship between a student enrolled in this mid-sized university in the Southeast United States' Education Leadership program and an administrator in which relationships are developed based on the strengths,

knowledge, and skills of the mentor and the knowledge of these areas that are needed by the mentee.

Parametric statistics - statistical test based on the normal distribution of data; must meet four basic assumptions in order for the test to be accurate: “normally distributed data, homogeneity of variance, interval or ratio data, and independence” (Field, 2009, p. 791)

Performance assessment - the rating of student performance, process, and product. Many performance assessments require higher-order thinking.

Performance task - A performance task enables pupils to demonstrate their ability to integrate and use knowledge, skills, and work habits in a meaningful activity.

Portfolio - “A portfolio is a purposeful collection of student work that exhibits the student’s efforts, progress, and achievements in one or more areas. The collection must include student participation in selecting contents, the criteria for selection, the criteria for judging merit, and the evidence of self-reflection” (Paulson, Paulson, & Meyer, 1991, p. 60).

Principal - refers to any person who is certified as an administrator through successful completion of a graduate course of study or certification program and who presently serves as the lead administrator of an elementary, middle, junior high, or high school.

Principal Preparation Program - refers to a program designed to prepare administrative candidates for leadership roles in schools.

Reflection - quality commentary, created by students, for the sake of improvement and performance (Benson & Barnett, 2005).

Self-efficacy - conceptualizes a person's perceived ability to perform a task as a mediator of performance on future tasks (Bandura, 1977).

Stakeholder - refers to an individual who has a stake in or may be affected by the program to be evaluated or the evaluation's results (Worthern, Fitzpatrick, & Sanders, 1998).

Standard - generally describing one of six ISLLC standards for school leaders.

Organization of the Study

This dissertation was divided into five chapters. Chapter I included a background of the problem, statement of the problem, the purpose and significance of the study, the research question which guided the study, and definition of terms.

Chapter II was a literature review that focused on the ISLLC standards and functions, leadership preparation programs including mentorship, performance-based assessments, and portfolios.

Chapter III contained the methodology for the study and reviewed the purposes of the study, research questions, data collection, and analysis of data.

Chapter IV presented the data analysis and the findings of the study. The findings were guided by the research questions.

Chapter V contained the conclusion, implications, and recommendations for further research.

Summary

Although portfolios provided a collection of artifacts documenting performance-based educational leadership activities, it was unclear how reliable these documents were

to indicate mastery of the standards provided by ISLLC. This research project was designed in order to explore the reliability of portfolios as documentation of mastery of ISLLC leadership standards.

CHAPTER II

A REVIEW OF SELECTED LITERATURE

Introduction

The perception of the role of a school leader emerged from being the lead teacher in a small school to being a manager of an organization. As new knowledge about effective leadership practices emerged, those in charge of developing preparation programs for school leaders responded by creating courses of study responsive to social change. As schools changed from being one-room, one-teacher structures to being multi-room buildings with students divided by grade and skill level, the need arose for someone to oversee schools for management and continuity's sake (Rousmaniere, 2007). Early school administrators were generally lead teachers who were not even formally trained. By the early 1900's, school board members who hired and fired administrators were the norm, and universities began offering a few courses to train educators to become school administrators. State certification for principals differed from that of teachers in only seven American states in 1923. After World War II ended, entire new programs of study had been introduced into universities to prepare educational leaders (Glass, 1962). Early processes involved in the construction of school leader standards and their assessment instruments had been considered for the last four decades. In 1968, Stufflebeam published the first of a series of articles about how to develop an educational evaluation process which was based on a research project lasting more than two years at Ohio State University. Members of state departments of education began developing individual assessments for principals and school leaders, and Georgia was one of the states which

led the principal assessment charge. In 1978 they began evaluating principals with the Georgia Principal Assessment System (GPAS) which was comprised of four distinct instruments scored by the principal, a teacher, an external observer, and someone from central office, often the superintendent (Ellett, 1978). The GPAS was one of the earliest instruments validated and standardized, carefully constructed over a four-year period of study. This instrument met several school assessment needs. “The items have been demonstrated to have validity; information has been demonstrated to be effective in targeting areas for improvement, and performance defects have been identified and corrected using these instruments” (McCleary, 2001, p. 49).

Members of the National Association of Secondary School Principals (NASSP) saw the need for more continuity among the states. In 1977, the NASSP members took several steps to build connections between state assessment and licensing processes, including establishing a psychometric testing center with which to evaluate administrators and potential school leaders (McCleary, 2001). In 1985, the National Commission on Standards for the Principalship (NCSP) was organized and funded by the NASSP (Erlandson, 1990). The commission’s focus was four-fold: determining the problems related to the establishment and enforcement of universal standards, reviewing what had already been done relating to development of standards, developing a course of action for identifying standards, and collecting data from educational leaders about their tasks and functions (Erlandson, 1990).

When national and school leaders read A Nation at Risk in 1983 led national leaders, not just school leaders, they examined educational leadership in the United States, wrote the No Child Left Behind laws, formed the National Education Standards

and Improvement Council, and eventually formed ISLLC, the Interstate School Leaders Licensure Consortium (CCSSO, 1996). ISLLC was recognized as one of the national guiding forces to develop standards by which school leaders were evaluated.

In this review of selected literature, the researcher first considered each of the six ISLLC leadership standards and their implications. Additionally, educational leadership training approaches, especially internships, were reviewed. Finally, the utilization of performance-based assessments as measurement tools for authentic appraisal of educational leader skills, including reflective portfolios, was examined.

ISLLC Leadership Standards

Members of ISLLC presented the original set of standards for educational leaders November 2, 1996. These standards were the catalyst for employees in 24 state education agencies to develop standards for educational leadership. Compatible with National Council for the Accreditation of Teacher Education (NCATE), members of state education agencies set forth guidelines for educational leadership preparation programs in colleges, universities, and state licensing agencies. The standards were designed to measurably increase educational leaders' performance.

> The ISLLC standards (CCSSO, 1996) were developed to help guide instructional delivery and field-based opportunities to ensure that aspiring school leaders are exposed to and immersed in project-based, experiential, researched, and hands-on experiences through a combination of traditional instructional methodologies, mentored experiences, and internships. (Weidmer, 2007, p. 18)

Representatives in the consortium wanted to raise the standards for educational leaders in order to train and retain the best leaders possible for schools. Six leader standards emerged, with indicators for knowledge, disposition, and performances listed for each (CCSSO, 1996).

In 2008, members of the Wallace Foundation sponsored a revisiting of the ISLLC standards of 1996. Realizing that many more empirical studies had taken place since the 1996 consortium, Leithwood, Lewis, Anderson, and Wahlstrom wrote a meta-analysis (2004). In this analysis they reported that classroom instruction was the most influential factor in student learning, but the second most powerful factor was school leadership. This set the stage for education leader training agencies to continue to improve educational leadership programs. Simplifying the standards, the 2005 ISLLC members eliminated knowledge, disposition, and performance indicators and replaced them with delineated functions (Babo & Ramaswami, 2011) which served as markers for educational leaders. These changes served a two-fold purpose by increasing the flexibility in leadership preparation programs and by reducing the confusion associated with the 1996 standards (CCSSO, 2008). Although the new standards retained the six major headings of the 1996 ISLLC standards, the 2008 consortium representatives reduced 183 knowledge, disposition, and performance indicators to 31 functions of school leaders while keeping the framework and goals to effectively develop capable and competent educational leaders (Weidmer, 2007). Eacho of the 2005 ISLLC standards are described below. Several components overlapped in the leader standards and were mentioned in more than one section. This was by design; leadership tasks necessarily draw from multiple leadership characteristics.

College and university professors that train school leaders have imbedded the mastery of these standards into their curricula in an effort to better prepare school leaders. University courses were designed around ISLLC leader standards. In this research project, raters correlated artifacts that were presented as evidence of standard mastery

with the standard with which they were compared. Having a deeper understanding of each standard was important to the researcher. The initial phase of research was to provide a thorough understanding of each standard.

Leader Standard 1

"An education leader promotes the success of every student by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by all stakeholders" (CCSSO, 2008, p. 14). Now principals were responsible not only for guiding the development of a vision of learning in a school, but also for sharing it, for executing it, and for carefully evaluating its progress (Devos & Bouckenooghe, 2009). In preparing individuals to become school administrators and leaders, college and university faculty provided specific areas of development guided by the ISLLC leader standards.

Development and implementation of vision.

Individuals in an educational leadership preparation program had to learn how to collaboratively develop a vision of learning then learn how to carry it through to its implementation and evaluation, while acting as the agent of stability during any necessary transition (Masci, Cuddpaph, & Pajak, 2008). Involving parents and community leaders in the process of deciding what students needed to learn and how to measure their progress was a powerful tool for student engagement and academic success (Wright & Saks, 2000). A leader provided direction for organizations; schools were no different. Standard 1 included direction for leaders to guide the creation and implementation of a shared vision of learning. School leadership took a two-pronged approach (Hulpia & Devos, 2009). Leaders who transformed organizations set a school

vision shared by all, and then they motivated stakeholders into implementing the vision (Hulpia & Devos, 2009). The necessity to understand the many dimensions of learning tasks was touted by Starrat (2005). He asserted that school leaders were responsible not only for learning to take place but also for ensuring that the learning accounts for helping students to grow into "an intentional self-governing community" (2005, p. 130) by establishing the democratic and somewhat idealistic climate of the school. This ability to multitask was vital. "A principal's capacity to facilitate conditions for student learning, manage the organization and build community partnerships is paramount to reaching essential school outcomes" (Militello, Gajda, & Bowers, 2009, p. 32). School leaders were the "critical link" (Louis & Wahlstrom, 2011, p. 54) to ensure improvement in student learning, but they worked as team players (Du, 2007; Hulpia & Devos, 2009). Lickona and Davidson stated the following:

> Great schools "row as one"; they are quite clearly in the same boat, pulling in the same direction in unison. The best schools we visited were tightly aligned communities marked by a palpable sense of common purpose and shared identity among staff -- a clear sense of "we." By contrast, struggling schools feel fractured; there is a sense that people work in the same school but not towards the same goals. (2005, p. 65)

Data collection and use.

A key component of this standard was encouraging the assimilation and proper use of data in order to ascertain what individual student's needs were. An article entitled "Data, Data, and More Data—What's an Educator to Do?" Goren summed up the quandary well by stating that "the ubiquitous nature of data now available in the public domain runs the risk of every other education fad that has preceded it: significant rhetoric that yields false promises about improving schools and the life chances of young people"

(2012, p. 233). Mountains of data abounded, but it was incumbent on school leaders to identify which data were significant and useful in the education of young people. Student achievement data were the most frequently data used, and most data were used as summative information to ascertain what students had learned after instruction, rather than formative which guided instruction, according to a study of 16 Michigan principals. Additionally, the study revealed that a great diversity existed relative to the extent to which school leaders utilized data to improve curriculum and instruction (Shen, Cooley, Reeves, Burt, Ryan, Rainey, & Yuan, 2010). Teachers were no more consistent; some were invited or required to dialogue with principals, parents, academic coaches, and consultants about data from standardized tests, benchmarks, and dropout rates, while others were not (Little, 2012). Effective school leaders knew how to navigate the treacherous data mine in order to identify which information guided toward their vision and goals. They were also equipped to lead teachers into understanding relevant data and how to utilize it to benefit students.

When school leaders interpreted and applied data in its educational context, the data helped leaders develop more effective visions and goals (Spillane, 2010). Two performances relevant to using assessment and demographic data in the development of a school's vision and goals were delineated in Standard 1. Educational leaders were skilled in the interpretation of relevant data and perceptive enough to know what was reasonable in the context within which this data was situated (Spillane, 2010) while guarding against misinterpretation, misuse, and unintended consequences (Coburn & Turner, 2012). People-minded principals felt more adept at involving teachers and other stakeholders in developing a shared vision when compared with administrative-minded principals (Devos

& Bouckenooghe, 2009). Therefore, it was important to identify leader candidates who were more administrative-minded and to develop their skills of creating shared vision.

However, were educational leaders charged with the task of developing and implementing vision, and they were also responsible for ensuring that existing school resources were utilized for goal-reaching purposes and for procuring the needed resources to ensure progress toward educational goals (CCSSO, 2008). According to Horng, Klasik, and Loeb, when principals left their school campuses, they usually were meeting with people in the school district or with external community stakeholders to obtain needed resources for the school (2010).

Creating, implementing, monitoring, and revising plans for continuous improvement.

Intentional decision-making practices were also addressed in Leader Standard 1. Descriptors in the standard delineated decision-making practices as always reflecting on how the decision met goals that were previously set. Exemplary educational leaders utilized the vision and mission as an objective and filtered all decisions through questioning how the change assisted in meeting goals. If plans did not work, they were changed (Quong & Walker, 2010). The goal of continuous improvement was at the forefront. For example, the Keller Independent School District was recognized by winning the Malcom Baldridge Quality Award which was usually given to an industry for its continuous improvement process. This school district's leaders were cited for developing a way to identify gaps in performance goals then using that information to develop action plans. Veitenheimer, one of the educational leaders of that district, said

that utilizing the structure enabled them to become “intentionally exceptional” (Johnson & Sommer, 2012).

Leader Standard 2

“An education leader promotes the success of every student by advocating, nurturing and sustaining a school culture and instructional program conducive to student learning and staff professional growth” (CCSSO, 2008, p. 14). Key components of this standard included school culture, learning climate for students and teachers, professional development, leadership capacity of staff, guarding of instructional time, and monitoring the impact of the educational process.

School culture.

The culture of a school was characterized by its “beliefs, attitudes and behaviors” (Phillips, 1996, p. 1). School culture was a broad descriptor encompassing collaboration, trust, expectations, motivation, leadership capacity, and many other attributes. Although school culture was an abstract concept, it was detected almost immediately. Daniel L. Duke noted that

> culture is conveyed in the way staff members think of themselves, their colleagues, and their work. It is embodied in assumptions about students and parents, beliefs about teaching and learning, and values regarding what it means to be an educator. (2010, p. 82)

As stewards of a school’s culture, an educational leader had an effect on collective teacher efficacy (Ross & Gray, 2006), and teacher efficacy had a powerful impact on student achievement (Goddard, LoGerfo, & Hoy, 2004). One of the most critical functions was recruiting and retaining staff members who were committed to the value of continuous improvement; a high turnover rate in teachers and staff was counterproductive

and undermining of the school's success (Duke, 2010). Team commitment, shared leadership, shared vision, and effective communication were additional descriptors of effective organizations (MacBeath, 2005; Salazar, 2007). Collaboration, trust, learning, and high expectation were integral factors school leaders embeded in the culture of a school of excellence (CCSSO, 2008).

Defining the school's mission, managing the instructional program, and promoting a positive school learning climate were key behaviors which coordinated positively to the effectiveness of a school (Hallinger, 2005). One researcher suggested that learning-centered leadership positively affected the outcomes on the Virginia Standards of Learning (SOL) test which provided quantitative evidence that school leaders who developed instructional programs conducive to student learning were more effective (Reardon, 2011). Evidence that learning-centered leadership played an integral part in student achievement was also found in other studies (Halinger & Heck, 1996; Hallinger & Heck, 1998; Leithwood, Louis, Anderson, & Wahlstrom, 2004; Leithwood & Jantzi, 2005; Lindahl, 2010; Sebastian, & Allensworth, 2012). The most significant effect principals had on student learning was that of school climate (Sebastian and Allensworth, 2012).

Developing staff instructional and leadership capacity.

Learning was not limited to the student population. School leaders who created professional learning opportunities for their teachers enhanced and renewed the teachers' passion for learning (Drago-Severson, 2007). By understanding professional learning needs and developing teachers within the building, many positive outcomes were noted (Leithwood & Mascall, 2008, Printy, 2008). Some of the outcomes of staff development

classes included more collaboration and cooperation, a better appreciation of the diversity within the school, healthy communication and expression of feelings, and better mediation skills (Collins, 2003). Teachers were able to consider new ways of thinking, behaving, and collaborating, and they felt supported and validated (Drago-Severson, 2007). The greatest benefit for improving instruction was strategic individual attention principals gave to teachers to support instructional practice (May & Supovitz, 2011). Insightful leaders knew how to balance individual instructional coaching and group coaching to invest time in the most productive manner. They also understood the value of supporting teachers.

Student motivation.

Motivating students was a challenging endeavor, but if a school leader developed relationships with the students as well as with the staff of a school, personalization of rewards became more effective. Stimulation, encouragement, and promotion were powerful leadership tools (Leithwood & Jantzi, 2006). Some motivation was in the form of verbal encouragement, but some schools had even begun having pizza parties and pep rallies to increase academic performance (Hollingworth, Dude, & Shepherd, 2010). By having celebrations of learning, school leaders demonstrated that reaching educational goals were valued. Principals showed that academic accomplishments were a priority by recognizing achievements of students and staff. Walls of fame, honor rolls, and attendance recognitions were ways to celebrate milestones for students, while public announcements recognizing teachers who obtained advanced degrees indicated that learning was a lifelong process. “It’s part of a leader’s job to show appreciation for people’s contributions and to create a culture of celebrating values and victories” (Kouzes

& Posner, 2007, p. 22). Creative ways to commemorate accomplishments of teachers, staff, and students was a trait of an effective leader. Leaders of excellence looked for meaningful methods to honor achievements.

Maximizing quality instructional time.

Guarding time spent on instructional activities was one of the most pressing challenges of an instructional leader. Balancing activities that promoted student engagement and celebrating student accomplishments with actual instructional time was exigent but necessary. Academically engaged time had a strong correlation with student achievement (Bellei, 2009; Harn, Linan-Thompson, & Roberts, 2008; Leithwood, Patten, & Jantzi, 2010; Marburger, 2006), and it fell to educational leaders to develop a culture which protected this time.

Transformational, distributed, and shared leadership.

Transformational leadership, distributed leadership, and shared leadership all led to more effective schools (Hulpia, Devos, & VanKeer, 2011). One especially notable benefit of shared leadership was the increase of teachers' organizational commitment which strengthened schools. Shared leadership did not mean that school leaders delegated others to be in charge of certain activities (Hulpia et al., 2011); effectiveness came from authentic collaboration which resulted in synergy (Marks & Printy, 2003). Although having more individuals involved in decision making was not always easy and could even be messy, a transformational leader utilized those situations "as learning opportunities rather than self-righteous occasions for punishment" (Starratt, 2005, p. 129). In their meta-analysis, Waters, Marzano, and McNulty (2005) revealed that

engaging stakeholders, including teachers and teacher-leaders, created a culture and climate for student success. A school leader's power and influence were not reduced when they augmented the power and influence of others (Leithwood, Jantzi, & McElheron-Hopkins, 2006). In fact just the opposite occurred. When principals shared leadership, a stronger sense of community and trust were established (Louis & Wahlstrom, 2011), and teachers took more ownership in educational issues (Smith, 2010).

Assessment and accountability.

With accountability came measurement of effectiveness, which came in many shapes and sizes. Student learning was a key component of the measurement of effectiveness of any given school, teacher, or leader. This information was gathered from formative and summative classroom assessments (Herman, Waldrip, Hall, & Chimino, 2012), school and district benchmarks, and state or national standardized tests. Some measurements were broad based and inclusive of descriptors such as teachers' caring about and challenging students (Crow, 2011). Other measurements were more focused on specific standards in particular content areas (Bulkey, Christman, Goertz, & Lawrence, 2010). Recent trends included measuring teacher effectiveness through student growth (Schafer, Lissitz, Zhu, Zhang, Hou, & Li, 2012). One key to improving student learning was assessment for learning (formative assessment) in order to identify misconceptions well before summative assessments were given (Popham, 2009). Educational leaders needed to be aware of local, district, state, and national trends in order to most effectively measure student growth and education.

School culture including collaboration, trust, high expectations, learning environment, maximizing time on instruction, and monitoring instructional effectiveness were addressed in Leader Standard 2. Each of these skills was important to obtain and maintain if an educational leader wanted to serve schools in a dynamic capacity. If educational leaders were proficient in these skills, they could nurture and sustain a school culture in which students made progress toward attainable educational goals.

Leader Standard 3

"An education leader promotes the success of every student by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment" (CCSSO, 2008, p. 14). Although it was important for principals to be strong instructional leaders, it was equally important that educational leaders had strong organizational management skills. "School leaders influence classroom teaching, and consequently student learning, by staffing schools with highly effective teachers and supporting those teachers with effective teaching and learning environments" (Horng & Loeb, 2010, p. 69). One of the key tasks of effective school leaders was guarding and guiding the stewardship of all resources, both tangible and intangible. Tangible resources included financial, structural, and technological, while intangibles included such assets as personnel and time.

Managing school resources.

Much attention was placed on transformational leadership, focusing less on the management aspects. However, some management tasks still remained a priority for school leaders. "The administrator must orchestrate the school's resources, structures,

and processes" (Starratt, 2005, p. 131) while being mindful of the entire organization. The effective leader needed to be knowledgeable in educational aspects of school such as learning, teaching, and student development, as well as the operational aspects such as building maintenance, equipment management, and fiscal operations including allocation of resources (Drake & Roe, 1994). Shared responsibility in making management decisions actually worked to improve morale in a school; if principals invested time in developing leadership potential in others, it empowered them (Du, 2007).

Managing technological resources.

Alignment and utilization of technology as a tool for learning and teaching was another component of Leader Standard 3. As technology became more available and necessary for the twenty-first century population, it was essential that educational leaders sought methods and means for cutting-edge technological tools to be integrated into the classroom. "…Our results suggest that a school's technology efforts are seriously threatened unless key administrators become active technology leaders in a school" (Anderson & Dexter, 2005, p. 74). These efforts included technology audits, goals, policies, budgets, and other supports (Anderson & Dexter, 2005). Teachers utilized more current technology in schools whose leaders integrated technology training into professional development. Interestingly, more true technology integration occurred in schools which practiced distributed leadership (Schrum & Levin, 2013). School leaders whose technology integration was considered exemplary developed teachers as leaders and depended on the teacher-leaders not only to lead technology integration but also to lead other school improvement missions as well (Leithwood & Jantzi, 2006; Schrum & Levin, 2013).

Managing human resources.

Hiring effective teachers was one of the most significant responsibilities of a school leader. “Without a question, the single most important task of a principal is to hire highly qualified, exceptional staff” (Mason & Schroeder, 2010, p. 186). School leaders were able to select teachers who knew the curriculum and knew how to impart that curriculum to students in various ways to ensure that all pupils applied learned skills to their lives (Starratt, 2005). As relationships were built with staff, developing the culture (Standard 2) was also enhanced.

Promoting and protecting safety of students and staff.

Noted in the ISLLC Standard 3 was school safety (2008, 14). Maslow’s hierarchy of needs identified feeling safe and secure as one of the basic components of human existence. The relationship between school leaders, teachers, and staff was the foundation of school safety (Collins, 2003; Kinney, 2009). In the 1980’s, as a part of school safety training, school administrators were trained in vocabulary related to toxic material detection and elimination (Hoyle, English & Steffy, 1985). Concerns such as gangs, weapons, drugs, and bullying were reported as the most troublesome safety issues in Arizona schools (Bosworth, Ford, & Hernandez, 2011). More than 825,000 victimization instances were reported in 2009 according to the 2011 Indicators of School Crime and Safety report. These instances included theft, violence, and simple assault. About 31% of students in grades 9-12 reported having been in a fight in 2009, and about 7% of students revealed they had carried a weapon on school property in the 30 days prior to the study (Indicators of School Crime and Safety, 2011).

As a response to weapons concerns, many schools installed metal detectors; however, research indicated that relationships were even more important than security devices and procedures (Bosworth et al., 2011). “The security loop would never have been closed without every student and staff member taking responsibility for the safety and security of others and their school” (Kinney, 2009, p. 54). Another researcher noted that educational leaders had the obligation to provide materials and direction for teachers to develop a learning community in which “democratic citizenry and social responsibility” (Pryor, 2010, p. 364) were the norm in order to end bullying victimization. Kinney discussed the effect of school safety on academic achievement and framed the need for safety succinctly, “How can principals expect their teachers to focus on curriculum, instruction, and assessment if they don’t feel safe?” (Kinney, 2009, p. 54). Students perceive that rule enforcement was the most significant factor in school safety (Booren & Handy, 2009). Students were asked to rate various safety strategies, including surveillance cameras and metal detectors, counseling, bullying prevention training, mental health, and policies and procedures. Students saw principals, teachers, and other adults in the building of paramount importance in regard to school safety. They indicated that the adults in the building consistently managing and enforcing safety rules made them feel more secure (Booren & Handy, 2009; Bosworth et al., 2011). However, Essex (2001) cautioned about the use of zero tolerance as an ethical discipline tool and universal remedy for discipline issues. Building compassionate relationships was seen as a much more effective cure for behavioral problems (Dufresne & McKenzie, 2009; Essex, 2001; Mirk, 2009).

Another safety issue which gained recognition in educational arenas recently was that of cyber-bullying. The delicate balance between freedom of speech and shouting fire in a crowded theater was seen when addressing cyber-bullying incidents. Educational leaders knew their legal obligations and took opportunities to protect victims of this rampant issue, while not trampling on the first amendment rights of the perpetrators. Hinduja and Patchin (2011) reviewed legal issues regarding cyber-bullying and the law and identified school leaders' guidelines for intervention: If it disrupted learning, if it interfered with education or school discipline, if it was done on school technology, or if it threatened or impeded another's civil rights, discipline may occur. Hinduja and Patchin suggested that educational leaders had to intervene on behalf of the victims of this epidemic problem which has led to traumatic emotional issues from low self esteem to suicide (2011).

Developing distributed leadership.

Encompassed in Standard 3, distributed leadership was discussed as one of the most important element in schools of excellence (Demir, 2008; Schrum & Levin, 2013).

> An essential ingredient in the principal's work is to intentionally share meaningful information, to build a culture of care, to develop and contribute to a communication in the school where as many as possible participate and to manage different themes of discussions in different arenas of communication. (Presthus, 2006, p. 82)

According to early analyses by Jantzi and Leithwood (1996) of 34 studies of transformational school leadership, practices of shared leadership facilitated improvement in schools when school leaders included faculty in school decisions. In a review of subsequent studies, Leithwood and Jantzi revisited transformational school leadership research (32 additional studies) and found several positive influences, from

modest to large in effect. They also found that perceptions of organizational leadership were significant and large, influence on student achievement was modest but positive, and that a positive, although small, effect was noted on student engagement in their 2005 meta-analysis (Leithwood & Jantzi, 1999). However, Timperly (2011) cautioned that if weak teachers were tapped to have influence in decision-making, then weak decisions were possible. Therefore, if pedagogically strong teachers were included in making leadership decisions in a true shared leadership and collaborative effort, more sound educational decisions were realized (Devos & Bouckenooghe, 2009; Du, 2007; Leech & Fulton, 2008). "Transformational leadership empowers followers and renews their commitment to the organization's vision" (Leech & Fulton, 2008, p. 641). Selection of those involved with collaborative decisions was strategic and often involved selecting those faculty members that a leader perceived as "co-conspirators," while selecting those who might oppose the school leader were positive as well (Kirby, Paradise, & King, 1992). By selecting both those who agreed and those who disagreed, a school leader built trust among more constituents. Learning networks were created; synergy abounded.

Protecting instructional time.

A final component of Leader Standard 3 was that education leaders were responsible for guarding instructional time and ensuring that quality instruction and student learning were occurring. Content leaders lost up to 8% of their instructional time dealing with interruptions that were mostly avoidable. One particular teacher had 18 interruptions resulting in 45 instructional minutes lost in one day (Glover & Miller, 1999). In exceptional education cases, the time spent non-instructionally was even more. Paperwork, discipline, IEPs, and other interruptions accounted for nearly 47 minutes per

hour of instructional time for one particular participant in a time-management study (Vannest & Hagan-Burke, 2010). High-quality instructional leaders learned to protect instructional minutes by seeking ways to reduce non-instructional responsibilities in order to improve student success (Berliner, 1990; Carroll, 1963). Lynch (2012) noted that principal preparation programs had a direct influence on how well building leaders addressed unique needs of exceptional education students, including instructional time. Concerns were also raised about how high-stakes testing had affected developmentally appropriate instruction. Musalino and White, in a 2010 study of middle-school instruction noted that prior to NCLB and high-stakes testing, 76-100% of the time was spent on developmentally appropriate instruction. Since then, a 7% drop was seen in utilizing developmentally appropriate classroom practices (Musalino & White, 2010). Scheduling (Bair, M. A. & Bair, 2010) and tardiness (Tyre, Feuerborn & Pierce, 2011) were additional issues that decreased teaching time, resulting in reduced academic performance for middle- and high- school students. School leader awareness of these issues was essential to addressing and preventing them from occurring.

The management and administration aspects of school leadership were communicated in Leader Standard 3. Effective leaders sought to acquire, to align, and to allocate all of a school's resources, whether tangible or intangible. They also intentionally invested in leadership development of promising faculty as they worked toward sharing leadership tasks among school personnel. As a critical part of school management, efficient leaders orchestrated resources to safely enhance the educational process and ensure protection of quality instruction.

Leader Standard 4

"An education leader promotes the success of every student by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources" (CCSSO, 2008, p. 15). School leaders had the challenge of understanding the academic and social needs of students and then collaborating with stakeholders to ensure those needs were met. They did this by accumulating and assimilating information about the community so that they really began to understand various stakeholders in the community. By attempting to build, nurture, and sustain relationships with students, parents, extended families, businesses, churches, and others with an interest in the education of children in a particular community, resources were mobilized to deepen and widen the impact of schools.

Building and sustaining positive and productive relationships with stakeholders.

A school's vision was not limited to its walls and doors. Educational leaders reached across boundaries to involve community stakeholders in coalitions with the goal of helping students achieve not only academically but also socially. One of the chief relationships which was nurtured was the one between the school and family. This relationship played a primary role in the success of students. Boske and Benavente-McEnery (2010) tracked student achievement when school leaders and teachers began making regular home visits. They found that as school personnel assumptions about the social and intellectual backgrounds of household members were altered, their relationships with students changed, and student achievement improved. One troubling

aspect was parents' refusing to engage in conversations that included negative feedback about their children. Cooperation between teachers and parents was one key to the success of students (Strom, P. S. & Strom, 2003). They indicated that teachers and parents had equally necessary functions. Instructors taught students what they must know and do to be successful academically, and parents ensured that children come to school ready to be educated and treat other people in the school civilly (Strom, P. S. & Strom, 2003). It was a school leader's responsibility to ensure those roles were understood.

School leaders involved individuals from businesses, faith-based organizations, social agencies, and others to dialogue and to determine what was best for students and families without dictating what those needs were (Jean-Marie, Ruffin, & Burr, 2010). Especially in turnaround schools, community partnerships were a critical component for school success (Duke, 2010). Joyce Epstein, director of National Network of Partnership Schools, asserted that it was the educational leader's responsibility to engage community members, not to leave it for them to "figure it out on their own" (Epstein, 2010, p. 29). Sheldon and Epstein (2005), in a longitudinal study, showed a small but positive association between student math achievement and math-focused family and community involvement. Partnerships between churches and low-performing schools were positive (Green-Powell, Hilton, & Joseph (2011). Building confidence in school-community relationships was positively related to input on school improvement planning, as revealed in a Utah strength-based study. If community members believed they had a direct impact on student achievement and believed they made a difference, they perceived a strong relationship with school leaders. In contrast, those involved in a pseudo-council (in name only) were demoralized and disappointed (Nygaard, 2010). Parents concurred as well. In

a study of 150 respondents, 73.2% agreed that partnerships between families, the school, and community were “useful” (Griffin & Steen, 2010, p. 221).

Building relationships with media outlets.

Media relationships were also a part of this collaboration standard. School leaders were concerned not only with radio, television and newspapers as in earlier years, but they also were barraged with the complexities of internet, e-mail, cellular phones, Facebook, MySpace, and other social media. “It’s up to the school administrator to accommodate the media and make a special effort to work with them” (Hoyle et al., 1985, p. 52). School leaders were challenged to create and preserve effective media relationships because the media often shaped public perception about schools. A good relationship with the media was indispensable in order for good rapport between the school and community to be present.

Effective leaders determined what student needs were by collecting and analyzing data and then by rallying community stakeholders in order to meet the educational needs of their students. These stakeholders included school personnel, students, their families, and friends as well as community members such as business leaders, faith-based partners, and social agencies. Through nurturing relationships with these stakeholders, effective school leaders mobilized community resources to meet the needs of diverse populations in schools. Additionally, researchers suggested that cultivating a positive relationship with media outlets provided a powerful opportunity to shape constructive rapport with all stakeholders. Collaboration not only with students and their families, but also with businesses, faith-based groups, media, and other neighborhood resources brought a sense of community for schools and their stakeholders. Collecting and analyzing community

data and then bringing educational processes that met community educational needs through the collective efforts of stakeholders was a necessary characteristic for school leaders.

Leader Standard 5

"An education leader promotes the success of every student by acting with integrity, fairness, and in an ethical manner" (CCSSO, 2008, p. 15). One researcher identified "five domains of an educational leader's ethical responsibility: as a human being, as a citizen and public servant, as an educator, as an educational administrator, and as an educational leader" (Starratt, 2005, p. 124). Starratt described a principal's influence as creating an environment in which the authentic learning took place or allowing an environment in which teaching and learning was curtailed (2005). He also remarked that no actions or decisions were neutral: Either they promoted teaching and learning, or they curtailed the education process (Starrat, 2005). Principals had the enormous challenge of managing the learning environment.

Setting a tone of democracy, equity, and diversity.

Because schools were made up of students from a variety of cultural, social, economic, and ethnic backgrounds, the principal had to set the tone of the school to value the diversity represented by the learning community. Model educational leaders not only embraced democratic ideals within schools but also propagated and modeled the ideals of social justice and equality to help students become better global citizens.

> "Schools are thrust into a position in which they must prepare children and communities for participation in a multicultural, multiethnic, multireligious, global society – where dramatically different world-views, values, and belief

systems characterize our geographic and electronically accessible neighbors" (Hoff, D. L., Yoder, & Hoff, 2006, p. 240).

Raising awareness of cultural, linguistic, and economic diversity within the staff of a school was one way leaders helped teachers improve their interactions with students and families of different backgrounds (Guerra & Nelson, 2009). With the idea of the common good at the forefront, those in school leadership verbalized and modeled inclusiveness (Hoff, D. L. et al., 2006). Inclusiveness and unity did not eradicate diversity; in fact, diversity was reverently celebrated in a learning community in which differences were understood and truly embraced (Rud & Garrison, 2010). School leaders were challenged with the task of including students and families from diverse backgrounds and cultures and of creating a unified learning environment.

Considering moral and legal consequences of decisions.

In its leader standards and functions, members of ISLLC pointed out that moral and legal consequences were to be considered (CCSSO, 2008). Split-second decisions had to be made regarding students, teachers, and community interaction so individuals who had been given the responsibility of making judgments had to have a deep sense of the impact of their choices (Patton, 2008). Codes of ethics for educators and administrators existed to guide those in schools regarding some decisions, but personal virtues such as "honesty, courage, compassion, generosity, fidelity, integrity, fairness, self-control, and prudence" (Patton, 2008, p. 3) were woven into the personal character traits of effective educational leaders When a questionable decision was made by a teacher, often the school leader was the mediator between teacher and student or parent (Johnson, Green, Kim, & Pope, 2008). Principals set the ethical tone for a school (Johnson et al., 2008; Patton, 2008) and led for students' best interest (Frick, 2011). As a role model for students, teachers, parents, and other stakeholders, a leader's ability to

treat others with respect was fundamental in setting a tone for those values to be expanded to all members of the educational community. An example of fairness in action occurred when the leader made choices which considered the diversity of those with whom the leader was in contact.

Modeling and promoting self-awareness, reflection, ethical behavior, and transparency.

Self-awareness, reflection, ethical behaviors, and transparency were traits of an effective school leader which were also considered in Leader Standard 5. Those behaviors were important for the development of a powerful educational organization, and they were also instrumental in renewing and sustaining a school leader's practice (Drago-Severson, Asghar, Blum-DeStefano, & Welch, 2012). Principals preparing for change found introspection and transparency an asset when preparing and leading schools through change (Zimmerman, 2011). These reflective practices helped school leaders identify personal beliefs, strengths, and weaknesses, and even helped leaders refrain from counterproductive behavior when under stress (Senge, 1999; Zimmerman, 2011).

The challenge of safeguarding the values of democracy, equity, and diversity was included in Leader Standard 5. All students had the right to an education, and it was incumbent upon the educational leader to instill that value as a non-negotiable guiding principle in the school. In a tri-national study, principals addressed the issues of "varied forms of diversity, from ethnic, cultural, religious and socio-economic background, to diversity of learning needs and abilities" (Billot, Goddard, & Cranston, 2007, p. 15). In fact, when diversity issues arose, excellent school leaders negotiated and taught students

how to democratically express their concerns and how to articulate their grievances (Kezar, 2008). Additionally, Kezar (2008) noted that school leaders anticipated political environments in order to prepare for any issues that arose and captured those times of controversy as teachable moments. Some of the strategies which were used in strong ethno-culturally diverse schools were as follows:

- a strong commitment to social justice principles, with these embedded in school practices and culture;
- an acceptance of difference and the capacity to work across various cultures, accommodating differences and using these as strengths;
- the setting of high learning expectations for all students and avoiding an "excuse culture";
- the celebration of the diverse ethnocultural nature of schools, with cultural and sporting activities that respect and highlight individual and group differences. (Billot et al., 2007, pp. 16-17)

Researchers expressed concern that those in training to become building leaders did not have enough exposure to issues regarding diversity, especially when it came to exceptional education (Hoppey & McLeskey, 2010). In fact, Hoppey and McLeskey cited instances of some being in principal leadership without having had a single course in undergraduate or graduate school that addressed special-needs students. Effective school leaders understood the needs of exceptional students as individuals and advocated for their inclusive education (Andrews & Covell, 2007; Hoppey & McLeskey, 2010).

In managing diversity, inclusion, and democratic issues in schools as well as safety, health, and content, a firm understanding of school law was necessary. From specific statues to case law, familiarity with legal concepts was necessary in order to ascertain the legal consequences of decisions made within school confines. No longer was it sufficient to have an understanding of legal theory (Stewart, 2005); model school leaders were familiar with legal changes which occurred frequently. For school leaders,

the maxim ignorantia legis non excusat which literally means “ignorance of the law does not excuse” (Davies, 1998, p. 342) applied. Effective educational leaders considered the moral and legal ramifications of decisions they made.

Ethical school leadership was the focus of Leader Standard 5. From accountability in assessment and finances to evaluation of moral and legal consequences of the many daily decisions a school leader made, it was imperative that school leaders had a highly developed moral compass which guided them. Successful school leaders served as examples of ethical behavior and were prepared to fervently protect the values of democracy, equity, and diversity.

Leader Standard 6

“An education leader promotes the success of every student by understanding, responding to and influencing the political, social, economic, legal, and cultural context” (CCSSO, 2008, p. 15). The education leader’s obligation to advocate for students and their families and caregivers as a part of the larger cultural picture was the focus of Leader Standard 6 (Anderson, 2009). This obligation included staying abreast of impending changes in policies, from local to national, which might affect student learning (Winton & Pollock, 2013). Effective school leaders were aware of emerging trends and adjusted leadership strategies accordingly.

Advocating for children, families, and caregivers.

Being an advocate for children ranked at the high end of importance of a principal’s functions, according to a study of school district superintendents (Babo & Ramaswami, 2011). Effective school leaders were involved in political agendas and were

stalwart advocates for students who were most at-risk (Anderson, 2009). Whether it was wellness (Belansky, Cutforth, Delong, Ross, Scarbro, Gilbert, Beatty, and Marshall, 2009) or safety (Cotton, 2003), effective school leaders championed causes to protect children in our schools. The leaders who daily oversaw student education were better at influencing lawmakers regarding class size, promotion and retention policies, charter schools, school finance, curriculum, and the myriad of other politicizing issues which affected children.

School leaders bore the burden of modeling compassion and understanding of the issues children faced to the faculty they led. As caring principals and assistant principals monitored the daily activities of the school, they encouraged teachers to be vigilant in looking for signs of child abuse and neglect (Lovitt, 2010). For students in difficult circumstances, Lovitt suggested watching for health issues, especially mental health, and being careful about assigning homework, because many of the children in abusive or neglectful situations did not have adults who had the ability to help them at home. On the other hand, Lovitt (2010) reminded educators that these students were often street-smart and manipulative. Savvy educational leaders discerned where these students really were and how to assist them.

Assessing, analyzing, and anticipating emerging trends.

From the issues facing gifted students (Duquette, Orders, Fullarton, & Robertson-Grewal, 2011) to the problems facing students with racial and ethnic diversity (Park & Denson, 2009), principals and local school leaders set the tone for conversation with parents and the community. They were aware of new legislation which affected the management and education in their schools. For example, in a 2011 case, Snyder v. Blue

Mountain School District, judges found that a student's internet posting in MySpace was protected under the First Amendment and that Tinker v. Des Moines did not apply to the ruling, although the posting created substantial disruption in the school setting (Harvard Law Review, 2012). Many principals have had to deal with disruption that technology has created (Cassidy, Brown, & Jackson, 2012).

School leaders were challenged with advocating for children and their families in Leader Standard 6. Educational leaders guarded them against decisions being made on a local, district, state, and national level which might not have been in their best interest. Commendable school leaders stayed abreast of, if not ahead of, emerging trends in order to minimize negative effects on their schools by adapting leadership practices appropriately.

Summary of Leader Standards

Effective educational leaders possessed a highly developed skill set related to ISLLC tasks and functions in order to encourage the achievement of every student. Facilitation of a vision of learning shared and supported by all stakeholders was addressed in Leader Standard 1. The development of a school culture centered on student learning and staff development was emphasized in Leader Standard 2. Management of organization, operations, and resources were incorporated in Leader Standard 3 in order to ensure a safe, effective school learning environment. Collaboration between faculty and community members and mobilization of community resources to ensure student success was the focus of Leader Standard 4. The school leader's responsibility to act with integrity and ethics was emphasized in Leader Standard 5. Finally, school leaders were charged with the task of advocating for children and their families in the larger political,

social, economic, legal, and cultural context in Leader Standard 6. Effective school leaders demonstrated mastery of ISLLC standards and functions.

Leadership Preparation Programs

Introduction

Preparation for being an educational leader had taken many forms in recent years, but the goal remained to train potential leaders for the pressures and demands of leading teachers to educate students. Researchers asserted that "preparation programs should do their best to deliver the content current and future school leaders need to carry out the demands of accountability and to fulfill their professional mission of leading a community of teachers to advance student learning" (Militello et al., 2009, p. 46). Because schools were ever-changing, leaders in effective university programs responded by offering courses that were relevant and were delivered in a germane approach (Weidmer, 2007). Faculty in these programs trained educational leaders through providing opportunities to experience skill-building through practice (Cunningham & Sherman, 2008; Leech & Fulton, 2008). By learning through experience, higher-order capacities such as "reading the situation, balanced judgement, intuition (not just hunch but tested against stored memory and ordered experience) and political acumen" (Cave & Wilkinson, 1992, pp. 34-35) were developed. Glatter also remarked that much of the useful information that leadership required was learned from personal interactions and was often much more difficult to acquire than formal knowledge (2009). University professors and in-service school leaders offered more authentic learning opportunities for pre-service educational leaders by entwining field-based experience with lecture (Mohn

& Machell, 2005). Cambridge (2010) suggested that deeper learning took place through performance-based, hands-on training. By pairing in-service and pre-service school leaders, administrative practitioners as well as university faculty members saw an improvement in the skills and competencies developed by the pre-service leaders when compared with new administrators who had not experienced field-based learning (Mohn & Machell, 2005).

Leadership Training Programs

Cibulka (2009) claimed that too little research was available that defined effective school leaders' knowledge and experience base. Cibulka also suggested that the lack of consensus among those deciding what constituted an effective program yielded programs that were developed on a weak research base. Others described leadership training programs as insufficient, decrying that "the majority of programs range from inadequate to appalling, even at some of the country's leading universities" (Levine, 2005, p. 23). Georgia's educational leadership training programs were criticized in one particular study. Breault (2010) stated that although 60% of the work for certification was conducted through the internship, there was no real theoretical or empirical evidence that the performance-based assessments that educational leader candidates experienced in the state of Georgia were better at preparing educational leaders than programs that were not performance based.

Performance-based programs.

In spite of the lack of agreement on what were components of effective leadership preparation programs, hands-on opportunities and internships were touted as valued

elements of leadership development. In fact, Cibulka (2009) suggested that training agencies for school leaders consider focusing on creating practice opportunities by generating situations which could actually occur in an educational setting. Practicing these scenarios was similar to utilizing teaching hospitals for preparing future principals and other school leaders. Numerous educational leadership program developers have instituted hands-on components in an effort to develop aspiring leaders' practical skills. Weidmer stated that "the challenge educational administration and supervision postsecondary professors face is to make their graduate courses meaningful, personalized, substantive and authentic" (2007, p. 17). For many programs, an internship was the model of practical skill development (Hines, 2007). Training leaders with knowledge acquisition alone, then providing them with a multiple-choice test with which to evaluate their competencies was inadequate. Prospective leaders had to be able to apply learned information to daily situations. "Students need to develop competencies because real life demands the ability to integrate and coordinate knowledge, skills, and attitudes, and the capacity to apply them in new situations" (Gulikers, Bastiaens, & Kirschner, 2004, p. 69). Aspiring leaders were connected with mentors who were currently in leadership positions and took on leadership roles alongside the mentors (Hines, 2008; Reames, 2010).

Performance-based assessments.

A wide range of mentorships existed. Some mentorships were haphazard, barely meeting the requirements of university programs, while others were intentional, powerful opportunities to groom aspiring leaders by challenging them with authentic opportunities to function as leaders while under the watchful eye of a more experienced principal or role model (Blumburg & Greenfield, 1986; Fry, Bottoms, & O'Neill, 2005). Often no real

connection was made between formal coursework and internship situations, so opportunities to ground leadership foundational principals in real-life school situations were left untapped (Blumburg & Greenfield, 1986; Gulikers et al., 2004).

Gulikers et al. completed a study on authentic assessments. Their findings included five dimensions of authentic assessment: "the assessment task, the physical context, the social context, the assessment result or form, and the assessment criteria" (2004, p. 70). They defined authentic assessment as "an assessment requiring students to use the same competencies or combinations of knowledge, skills and attitudes that they need to apply in the criterion situation in professional life" (2004, p. 69). In order for an assessment to be authentic, it required similar cognitive processes, skills, and attitudes as a comparable real-life situation (Gulikers et al., 2004; Savery & Duffy, 1995). Student ownership in the assignment was comparable to that of adult professionals doing similar real-world tasks (Gulikers et al., 2004). In order for the performance-based assessment to evaluate the skill one had in a particular competency, the tasks included in those competencies were executed in a real-life situation. Wiggins (1989) simply stated that the authentic assessment was a similar product or performance that was presented in a real-life situation.

Another consideration regarding performance-based assessment and performance tasks was the physical context. Because the literal as well as the figurative environments were less controlled and less clean than the sterile, safe learning environments of colleges and universities, it was important to assess one's ability to perform a task in a natural setting. Well-designed performance-based assessments mirrored the real-world application as nearly as possible and exhibited the understanding and competencies of a

student, as well as the mind-set with which the task was executed (Brown, Collins & Duguid, 1989; Gulikers et al., 2004; Herrington & Oliver, 2000).

Although the setting of the real-life situation on which competencies were demonstrated was important, Gulikers et al. (2004) argued that perhaps the most important factor was the social processes component. These researchers suggested that, if the real life task was usually completed within a team or network of individuals, a team or network should be consulted when performing the performance-based assessment. Not all would agree. J. Herrington and Herrington (1998) suggested that all tasks required collaboration, and that collaboration was a defining point of authenticity. Conversely, Gulikers et al. (2004) proposed that the necessity to collaborate or not was determined by whether or not the tasks were performed by individuals or groups (2004). Internships were often imbedded within coursework and normally had some sort of assessment related to the task. Because the practicum was a performance-based activity, utilizing skills to work in real situations to benefit schools, school districts, and students was frequently a component of the internship. Internships helped students develop skills in a real-world environment (Hines, 2007). Militello et al. challenged institutes of higher learning to prepare school leaders to "carry out the demands of accountability and to fulfill their professional mission of leading a community of teachers to advance student learning" (2009, p. 46). Militello et al. revealed that most of the respondents in their survey of participants in the Massachusetts Department of Elementary and Secondary Education educational leadership licensure programs cited internships as "very helpful for their practice" (2009, p. 39), although the remaining 12 of their 13 preparation courses were not. In contrast, most respondents rated alternative preparation programs a

bit higher than traditional public or private university leadership preparation programs. Survey participants scored non-traditional programs such as online training courses and district-university partnerships as more adequately preparing them for challenges facing educational leaders (Militello et al., 2009).

Valid inferences about the ability of the candidate to carry out required tasks were made by watching the candidate complete product or performance tasks (Darling-Hammond & Snyder, 2000). Candidates demonstrated their ability to discern when and how to apply skills to multiple situations with the necessary range of depth (Darling-Hammond & Snyder, 2000). Candidates defended their ability to demonstrate mastery of standards by presenting a collection of written or oral work samples (Gulikers et al., 2004; Wiggins, 1989).

Reflective portfolios.

How to assess such mentorships was another issue raised. Performance-based learning tasks were not graded according to "right" and "wrong" but were evaluated for many other elements. Higher order thinking processes were evaluated, and more than one right answer existed. The means by which many universities have chosen to have students demonstrate their performance in their internships was through a reflective portfolio (Meadows & Dyal, 2000; Meadows, Dyal, & Wright, 1998). More than 90% of university administration programs used portfolios in some capacity (Norton, 2004). In some of the portfolios, leadership candidates logged activities and numbers of hours spent performing them and submitted a reflective piece relating that activity to classroom tasks or to connect theory and practice (Moerkerke, Doorton, & deRoode, 1999; Norton, 2004). Moerkerke, Doorton, and deRoode called this an assessment result (1999), which

was then evaluated by comparing it to some sort of assessment criteria. Portfolios were used in other programs to document professional growth or to promote reflection (Norton, 2004). Professors of many educational leadership departments required reflective portfolios to be kept as record of the internship activities. These portfolios were reviewed and graded as documentation of the participants' real-life practice of skills and competencies necessary for school leaders, thus meeting the requirements of being a performance-based assessment (Meadows & Dyal, 2000). Weidmer (2007) reported that one university required students to choose mentors through an interview process, selecting people with whom they would like to establish a significant working relationship. The students sought guidance, reviews, and feedback from their mentors regarding the artifacts in the portfolios.

Portfolios were described as "a focused purposeful collection of student work that documents evidence of traditional and nontraditional sources of student learning, progress, and achievement over time" (Gadbury-Amyot, Kim, Palm, Mills, Noble, & Overman , 2003, p. 991). Brown and Irby portrayed administrative portfolios as "a collection of thoughtfully selected exhibits or artifacts and reflections indicative of an individual's experiences and ability to lead and of the individual's progress toward and/or attainment of established goals or criteria" (2001, p. 2). Components of the portfolio included a variety of artifacts, attestations, reflections, revisions, feedback, and reviews (Hackman & Alsbury, 2005; Wildy & Wallace, 1998). Artifacts, evidence of learning about educational leadership, consisted of school schedules, budgets, school improvement plans, emergency plans, student and teacher handbooks, and reflective journals (Hackman & Alsbury, 2005, p. 37). Portfolios contained

> course assignments as research papers, an educational philosophy statement, a leadership platform, the student's resume, and a variety of performance-based assessments, such as student's materials from a clinical supervision activity conducted with a teacher, action research project; case study analysis, data disaggregation and analysis of a school's achievement test scores, creation of a three-year parent involvement plan for a school; or a school cultural analysis. (Hackman & Alsbury, 2005, p. 37)

Attestations, written by someone other than the student, authenticated skills and competencies the mentee had attained. For example, "college transcripts, letters of recommendation, professional licenses, personal notes from parents and students and honors and awards" (Hackman & Alsbury, 2005, p. 37) could be added to a portfolio's documents to verify a pre-service educational leader's accomplishments.

Reflections were a powerful tool for developing thoughtful insights into learning. One professor trained university IT students how to write reflections for their electronic portfolios by utilizing up to one-third of alloted teaching time during a semester on the reflective process. Students practiced the reflective process by interacting in a forum, commenting on reflections of classmates, and interacting until all were satisfied with each student's reflections. They encouraged each other to dig deeper into their understanding, an act which inspired better reflections and, consequently, better portfolios (Hadley, 2007). The instructor of the educational leadership course taught students reflective processing by imbedding reflection within several assignments (Castelli, 2011). All assignments had reflective questions associated with them, and then upon return to class, students and instructors evaluated the evidence and thoughts collectively. For example, the instructor challenged students to interview educational leaders about how they developed leadership skills then to reflect on similarities and differences between them and the interviewee. Additionally, the final exam was

purposefully reflective, asking students to reflect on powerful assignments in which their paradigms were challenged. As a part of the exam, a Reflective Consolidation Paper, students were asked to comment on the reflective learning process and how reflection influenced their thinking about leadership development. Students confirmed prior studies which suggested that the reflective learning process required them to evaluate their personal "values, beliefs and assumptions" (Castelli, 2011, p. 27). Subsequently, when the instructor created a safe discussion place for these thoughts, students evaluated alternative ideas and even incorporated them into personal belief systems, therefore transforming their paradigm (Castelli, 2011). Reflection was essential to practicing transformational leadership.

Researchers in another university study sought to understand how students experienced project-based learning assignments (performance-based) by reflecting on the processes of how and what they learned while they created the artifacts for their engineering portfolios. Thirteen junior and senior engineering students were interviewed about their epistemological and reflective experiences. They reported that they remembered what they learned for a longer period of time, they saw how theories from class and practical experience were related, and they acquired improved motivation and attitude toward particular classes because they could see the relevance of course material when they reflected on what they learned. Additionally, they differentiated between going through the motions of learning theoretical concepts and integrating the theories into real-life practice (Turns, Cuddihy, & Guan, 2010). Reflective practices enhanced the learning process for these engineering students.

In a survey about the use of portfolios, Wildy and Wallace revealed that these portfolios were being used in four distinct ways: “as evidence of improvement, as organizer, as record of achievement, and as collection of work samples” (1998, p. 126). The model portfolio was a working document with commentary and feedback from professors and mentors (Weidmer, 2007; Wildy & Wallace, 1998). Assignments were supervised, personalized, and standards-based (Weidmer, 2007). The portfolios were seen not only as teaching tools for the development of a pre-service leader’s knowledge (Drago-Sverson, 2011; Wildy & Wallace, 1998) but also as a way to document student learning, development, professional accountability, and improvement, especially when coupled with guided reflection (Brody, Vissa, & Weathers, 2010; Hackman & Alsbury, 2005; Lazaridou, 2009; Wildy & Wallace, 1998). Freed and Huba (2000) suggested that portfolios were not assessments if someone did not assess its contents. In fact, without feedback, the portfolio simply became a collection of work samples (Wildy & Wallace, 1998). Critics of incorrectly used portfolios described them as “resumes on steroids” and a “blown up daily diary” (Wildy & Wallace, 1998, pp. 133-135). Without some sort of assessment, validation of competencies did not occur; rather, the process of building a portfolio just proved a book could be filled (Tochel et al., 2013). Portfolios were versatile tools if their purpose was clearly stated and if they were assessed interactive documents which were utilized for student learning, reflection, and growth.

Electronic portfolios.

With the rise in electronic accessibility, many schools moved toward the electronic portfolio as the culminating work of an educational leadership graduate student. Through web-based portfolios and e-portfolios, activities were readily linked to

competencies or standards (Redish, Webb, & Jiang, 2005-2006; Tochel et al., 2013). Scholars were able to capture evidence from diverse formats (video, print, and presentation) to support their learning (Cambridge, 2010). For instance, with the use of e-portfolios, in addition to paper documents, video and pictorial evidences could be provided to validate one's experiences. Cambridge advocated the e-portfolio platform because it provided a means through which students could have "a stronger sense of ownership, self-efficacy and self-authorship" (2010, p. 25). An additional bonus was the flexibility for users to access virtually unlimited information (Tochel et al., 2013). Another researcher cited reduction of paper use and storage space as added benefits of an electronic portfolio format (Wiedmer, 1998).

Regardless of the platform, a portfolio's value was relevant to the requirements and reflections collected. Reflections allowed students to integrate theory and practice at a deeper level, as well as to showcase intellectual and professional growth (Brody et al., 2010; Drago-Sverson et al., 2012; Gadbury-Amyot et al., 2003). Students also took more responsibility for their performance because they were taking more ownership in their experiences (Gadbury-Amyot et al., 2003; Wildy & Wallace, 1998). In a survey study regarding their capstone projects, university seniors indicated that they were able to evaluate their own growth, they could see how coursework related to actual practice, and they could integrate skills and knowledge from a variety of courses (Buzzetto-More, 2010). These portfolios were more student-centered (Buzzetto-More, 2010). Reflections were designed to help students dig deeper into their own paradigms, and discussions about those reflections challenged their assumptions, assisting pre-service leaders to devise new ideas about handling multifaceted situations (Drago-Sverson, 2011).

Although speaking of e-portfolios specifically, Cambridge's observation worked for either electronic or paper portfolios:

> At the heart of the process of composing an e-portfolio is reflection on evidence. E-portfolio authors need to move beyond simply aggregating and sorting evidence to reflect on what each piece means and how it relates to other items, the e-portfolio as a whole, and the author's identity and the institutional context in which he or she lives, works, and learns. (2010, p. 199)

In fact, E-portfolios were slightly more effective in two areas: feedback and reflection according to a study by Tochel et al (2013). They reported that one drawback in the use of the electronic format was technophobia: A user's ability to interface with computers could still present a barrier if their technical ability was limited (2013).

One question raised in the use of portfolios was whether they were personalized, offering more room for personal exploration and reflection, or whether they were standardized, with strict limitations of what must be found in the portfolios. Cambridge (2010) noted that the two were not exclusive: The use of personalized portfolios provided and supported direct authenticity, while the use of standardized portfolios indirectly created an outlet for performance-based assessment. In order to streamline evaluation of portfolios, Strudler and Wetzel (2011-2012) suggested that a blend of standard artifacts relating to state and national standards which all students included and a few individualized artifacts which were unique to a particular student's showcase of work offered benefits to both professors and students. Program-selected, standardized artifacts were evaluated with common rubrics relating to state and national standards, while student-selected artifacts assisted students in identifying areas of learning and progress.

One of the attractive aspects of portfolio use was the opportunity for individuals to construct their own learning, which is a higher-order thinking skill. However, Wildy

and Wallace (1998) noted that out of necessity some sort of proof of validity of the achieved functions or standards must be obtained. In one example, the students and professors created a scale for measurement of the portfolio entries compared with the standards. The students measured themselves against the standards, and then a faculty reviewer evaluated the entries. Opportunity for conversation about the attainment of standards was created by any discrepancies. This dialogue was a teaching tool as well (Weidmer, 2007).

Student reflection.

Student reflection was an essential piece of the portfolio documentation. Model portfolios contained detailed student explanation of each artifact. Students situated the artifact in its context in order to defend its placement with a particular standard in the portfolio. Through this practice, students demonstrated skills mastery and understanding of the standard and acquired a platform from which to explain any knowledge gained (Borko, Michalec, Timmons, & Siddle, 1997; Hackman & Alsbury, 2005). Yancey (2009) declared that a student's ability to select artifacts, reflect on their meaning, and connect them to standards was also an instructional opportunity as well as a way to measure what a student had learned. Quality reflection took time, but it was central to the learning progression (Strudler & Wetzel, 2011-2012)

Concerns regarding portfolio use.

A researcher who performed a national study of portfolios utilized in education administration graduate schools revealed several issues related to portfolio use. Although 96 % of the professors in these graduate schools of education administration saw the

portfolios as highly or considerably beneficial in developing transformational leadership traits and reflection, these same respondents complained that they were time-consuming to evaluate. In fact, one respondent even suggested that the time investment did not result in adequate return. Approximately 63% of the respondents indicated that finding time to assess student portfolio quality was problematic (Norton, 2004). Although they could see benefits, some university professors were skeptical about the power of portfolios in educational administration programs.

Other time constraints related to the use of portfolios were related to creation, artifact selection, and instruction on how to assimilate the portfolio. A common concern was the student time taken to create and organize the artifacts and reflections (Shepherd & Hannafin, 2013). Strudler and Wetzel (2005) concluded that much training and coaching was needed for quality portfolios to be created. This training involved university instructional time as well as student classroom time to be invested in selection and assimilation of portfolio entries.

Concerns regarding reliability.

Performance-based assessments, including portfolios and their electronic counterparts, were not without criticism. Worthen, Borg, and White (1993) identified concerns regarding the honesty of entries, technical quality, the standardization of assessment of the work, and the appropriateness of portfolios for high-stakes assessment. Other researchers raised concerns about reliability among those who assess the work (Barton & Collins, 1993; Shulman, 1998). In a study of 30 preservice teacher portfolios, Chronbach's alpha and Pearson product-moment correlation coefficients were found to support inter-rater reliability, but Cohen's kappa did not (Derham & Diperna, 2007).

Fook and Sidhu (2010) noted that performance-based assessments lacked validity and reliability, and they were time-consuming. If the mentorships were not providing both training in real-life situations and the opportunity to assess leadership candidates as they dealt with authentic situations, was there a clear opportunity for evaluation of a potential leader's ability to handle real-life issues which arose in schools? In a list of five questions that researchers raised about portfolio use, one was how it ensured the validity and reliability of the performance of the student (Evans, Daniel, Mikovch, Metze, & Norman, 2010). Clearly researchers were concerned about the reliability of portfolios as a measure of how well students had mastered concepts.

Summary of Leadership Training Programs

Many institutions of higher learning implemented programs with components which utilize performance-based assessment. The measurement of performance in many cases involved students creating portfolios of artifacts which indicated participation in and mastery of real-life educational leadership situations. More often, universities moved toward an electronic format for these portfolios. Mastery was better demonstrated in reflective portfolios, but students had to be taught how to reflect on artifacts contained in the portfolios. Some researchers raised concerns about the reliability of portfolios to measure mastery of performance standards.

Summary of the Review of Literature

Preparation to meet the ISLLC Standards for School Leaders involved experience in each of the six standards and descriptive functions. Exemplary education leaders developed, implemented, assessed, and evaluated progress toward a shared vision. They

also created a school culture of high expectation of student learning by comprehensive curriculum taught with appropriate technology, motivation, assessment, accountability and evaluation. Operational and managerial skills were needed to ensure a safe environment in which to teach and learn. Relationships with and celebration of a school's and a community's diverse population ensured mobilization in and sustainability with the local neighborhood and its rich cultural, social, and intellectual resources. Ethical leaders interacted with all stakeholders in a moral, legal, and democratic manner. Finally, ideal education leaders relentlessly advocated for children and their families in the larger political picture, analyzing trends and initiatives to ensure that they were in the best interest of the stakeholders, especially the students.

With such monumental standards and functions, the preparation of educational leaders was a critical component of their success. In response to state and national directives, many university visionaries wove an applied, hands-on component into their training curriculum. For numerous institutions of higher learning, this was a mentorship in which students enrolled in education leadership programs were paired with in-service leaders and were given practical tasks to complete under the watchful eyes of their mentors. As evidence of their experiences in the ISLLC standards and functions, some were required to keep portfolios as record.

Performance-based assessments of student work were often evaluated to ensure mastery of skill. In educational leadership programs, these performance-based assessment records were sometimes in the form of reflective portfolios or, more recently, electronic portfolios. Students included artifacts of their experiences of each of the ISLLC leader standards, reflecting on their practices and performances as indicators of mastery of

needed skills. However, very little evidence existed regarding the reliability of these portfolios as indicators of student mastery. The educational leader portfolio was examined through intra-class correlation to determine the reliability of its evaluation as measurement of mastery of the ISLLC standards and functions.

Table 2.1 Concept Analysis Chart

STUDY	PURPOSE	PARTICIPANTS	DESIGN/ ANALYSIS	OUTCOMES
Gadbury-Amyot, Kim, Palm, Mills, Noble, & Overman (2003)	Examined validity and reliability of portfolio assessment in a dental hygiene program	7 faculty raters	7 raters examined 20 portfolios, -primary trait analysis rubric -fully crossed, two-facet generalizability study for reliability	-portfolios could serve as a valid and reliable measure for assessing student competency -significant relationship between portfolios, GPA, and NBDHE, -no significant relationship between portfolios and CRDTS -rubric contributed greatest amount of variance (78%); faculty rater contributed only small amount of total variance (1.28%); smallest variance came between rubric and portfolio (1.15%) -Phi coefficient of .86 was obtained by reducing the number of raters to three
Hackmann & Alsbury (2005)	Reported findings of analysis of student portfolios in an educational leadership program and changes made to a university preparation program based on findings	26 portfolios from principal licensure students who had graduated between Fall 2001 and Summer 2003	Deductive qualitative analysis on a 4 point scale -inter-rater reliability -content analysis protocol -185 ISLLC descriptors	-unnecessary content overlap -absence of essential curriculum content -confusion about the type of portfolio (of learning or for learning)
Militello, Gajda, & Bowers (2009)	Reported findings from school principals' perceptions of nature and quality of certification programs	605 Massachusetts principals	Survey	-Field internships, teacher supervision and evaluation were the only leadership preparation courses more than 50% of the principals found helpful -Principals found internship-like experiences more helpful in preparing them than coursework. -Skills leaders practiced must meet the expectations we hold for them.

Table 2.1 continued

STUDY	PURPOSE	PARTICIPANTS	DESIGN/ ANALYSIS	OUTCOMES
Meadows & Dyal (2000)	Examined the value and utility of the Leadership Portfolio from the perspective of students enrolled in the Ed Leadership program	27 Educational Leaders from Auburn University Montgomery's Ed Leadership program	Descriptive survey	-70% strongly agreed and 30% agreed that portfolio assessment measures graduate academic performance better than traditional exams -88% believed portfolio assessment improved the quality of assessment procedures at their school. -70% believed that creating the portfolio provided an opportunity to reflect on leadership practices. -89% agreed that portfolios gave them opportunities to show examples of student achievement.
Turns, Cuddihy, & Guan (2010)	Explored the potential for portfolio construction and reflection to be used to enhance project-based learning	13 junior and senior university engineering students	Interviews from those who saw the portfolio as significant (5), muted (5), and limited (3)	-awareness of what they knew -saw how class and experience related -improved motivation and attitude toward particular classes -differentiated between going through motions and integrating theory into practice
Castelli (2011)	Presented a simple model of reflective learning	Class members of an educational leadership class	Reflective assignments throughout course and reflective consolidation paper as the final exam	Reflection is essential to practicing transformational leadership
Hadley (2007)	Sought to develop reflective practice by conducting portfolio forums	Subsequent semesters of university students	Qualitative anecdotal observations	-By nurturing reflective practice and feedback, students developed fluency in reflection -balance between technical portfolios and the learning process -by training students to be thoughtful about their reflections early in the program, better portfolios were presented.

CHAPTER III

METHODOLOGY

Introduction

The methods and procedures utilized to carry out this study were described in this chapter. It included the following: 1) Introduction, 2) Research design, 3) Population and sampling plan, 4) Instrumentation, 5) Procedures, 6) Methods of data analysis, 7) Reporting of results, 8) Evaluation of research methods, and 9) Summary. The purpose of this study was to determine the reliability of the portfolio as an assessment tool. The portfolio measured the extent to which participants in Randolph State University's[1] (RSU's) educational leadership program demonstrated proficiency in the ISLLC leader standards.

In developing this research project Crotty's (1998) questions were considered. He suggested that in developing research projects, decisions about the epistemology, theoretical practice, methodology (techniques), and methods (procedures) must be made. Creswell (2003) suggested that this information be summarized to select an alternative knowledge claim position from which the researcher viewed the problem. This project had a pragmatic approach: The researcher was interested in determining "what works" with the use of portfolio entries as evidence of mastery of the ISLLC standards (Council of Chief State School Officers, 2008). This study was a problem-centered approach that was focused around the real-world practice of utilization of portfolios as performance-based measures of mastery of the ISLLC standards. The purpose of this study was to

[1] RSU is a pseudonym

determine the reliability of the portfolio as an assessment tool. The portfolio measures the extent to which participants in CSU's educational leadership program demonstrated proficiency in the ISLLC leader standards. The six Standards for School leaders were the following:

1) Shared Vision
2) School Culture
3) School Management
4) Collaboration,
5) Educational Ethics, and
6) Influence.

The researcher utilized the intra-class correlation coefficient to determine reliability and utilized written surveys from raters to assist in deepening the understanding of the results.

Description of Research Methodology Design

Research Questions

Answers to the following questions were sought to address the purpose of the study. The quantitative question was, to what extent are portfolios reliable as evidence of mastery of the ISLLC standards and functions of students enrolled in an educational specialist leadership program when measured by intra-class correlation? The qualitative question was why does consistency or inconsistency exist among the raters regarding how the artifacts related to the standard?

Rationale for a Mixed-Methods Paradigm

The intent of this two-phase, sequential mixed-methods study (Creswell, Plano Clark, Gutmann, & Hanson, 2003; Tashakkori & Teddie, 1998) was to determine the reliability of portfolios as evidence of mastery of the ISLLC standards. After developing the research question, the researcher decided that numerical data alone would not explain the results. A mixed-methods methodology was needed. To aid in design selection, three questions had to be answered. First, would quantitative and qualitative data be gathered at the same time, or would one be gathered first? Second, would the quantitative and qualitative data be equally weighted in the results, or would one be weighted more than the other? Finally, the question of how to merge the results was asked (Creswell, Plano-Clark et al., 2003). This researcher chose to gather data at the same time (concurrently) for both methodologies. Both methodologies carried equal weight, and the results were merged during interpretation. (See Table 3.1)

Although the quantitative and qualitative data were collected concurrently, they were evaluated in phases. In the first phase, the quantitative research question addressed the reliability of portfolios by using intra-class correlation. Information from this first phase was investigated further in a second qualitative phase. In the second phase, qualitative written comments from portfolio raters were used to probe noteworthy correlations by exploring aspects of the portfolio artifacts. The rationale for following up with qualitative research in the second phase was to gain a better understanding of portfolio ratings and to explain the quantitative results (Creswell, 2008).

Table 3.1

Table of Decisions about Mixed-Methods Research

Research Item	Decision
Research approach	Mixed methods
Knowledge claims	Pragmatic assumptions
Strategy of inquiry	Mixed methods design
Methods	Closed ended measures (ICC) Open ended observations (written observations from raters)
Data collection type	Quantitative- Likert-type rating scale Qualitative-Document of written observations from raters
Advantages of data collection type	Utilize language of participants Accessed at researcher's leisure Thoughtful data which raters contemplated No transcribing necessary
Disadvantages of data collection type	Incomplete (some raters provided no commentary)
Data analysis and interpretation	Quantitative- ICC Qualitative- Phenomenology
Lens	Pragmatism
Coding process	Read all commentary, looked for themes, wrote down themes Selected a rater's commentary (the most comments) Wrote comments from that rater on cards Grouped them and named categories by prevalent theme Read all other rater comments, wrote them down Placed the other rater comments in appropriate group, if available Created new group if no appropriate group was available Divided groups by standard if necessary
Perspective	Rater's perspective on portfolio
Validation	Triangulation with literature and examples in portfolios Member Checking (inspection, clarification, approval) Rich, thick description

In addition to the intra-class correlation (ICC) reliability study, each rater was asked to provide feedback on the artifacts given. Utilizing a quantitative method (ICC) and a qualitative method (written feedback) made this study a mixed-methods investigation. The open-ended question was to provide feedback that would assist in making the portfolio artifacts effective indicators of mastery of ISLLC standards. When adding a qualitative component to a quantitative research project, additional factors had to be considered. The researcher sought to combine quantitative data from ICC but wanted to examine the data in a deeper way, so a pragmatic approach was selected (Onwuegbuzie & Leech, 2005; Tashakkori & Teddie, 1998).

Three main schools of thought emerged from the quantitative-qualitative disagreement also regarded as the "paradigm war" (Gage, 1989): purists, situationalists, and pragmatists (Rossman & Wilson, 1985). When viewed on a continuum, purists were situated on one end, situationalists in the center, and pragmatists on the opposite end from purists. Purists believed that quantitative and qualitative research methods differ in their ontology, epistemology, and axiological assumptions about the nature of research. The purist posited that the two methods should never be mixed. Situationalists held to the idea that the two methods should not be mixed, but they saw value in contributions that either method offered. They held to the mono-methodology of the purist but believed certain research questions could only be studied from a quantitative approach, while other research questions required a qualitative approach. On the far end of the spectrum, pragmatists posited that both methods had much to contribute, and utilizing both methods capitalized on the strengths of each method while reducing the impact of each method's weaknesses (Onwuegbuzie & Leech, 2005). Pragmatism drew from both qualitative and

quantitative methods and techniques to collect and analyze data from various sources (Creswell, 2003).

The pragmatist sought to "provide the best understanding of a research problem" (Creswell, 2003, p. 12), and the researcher engaging in pragmatic studies needed to explain the need for the mixing (Maudsley, 2011). The researcher did not believe that simply calculating the ICC (quantitative) would provide enough information to be especially useful to educational leadership programs; therefore, the researcher designed the study with a written survey component (qualitative) to explain the scores and to suggest ways to improve the portfolio. A Concurrent Nested Strategy was employed in this study (Creswell, 2003). This strategy suggested that one of the methodologies took precedence over the other, and as such, was nested within the other. In this case, the quantitative results took precedence over the qualitative, and the qualitative was used to explain the quantitative. Therefore, the qualitative is nested within the quantitative (Creswell, 2003). The researcher wanted to gain more insight into the rationale behind the ratings, specifically, why scores were given as they were, and how could higher scores have been earned?

Selection of Design

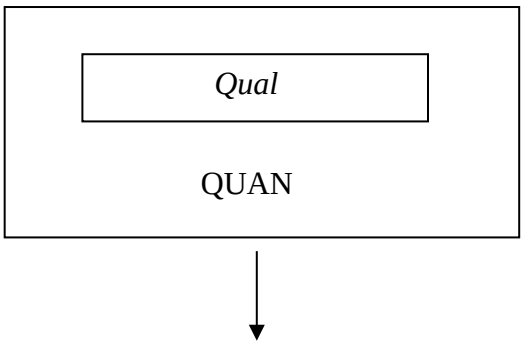
A major challenge of mixed-methods research was the decision regarding prioritizing the methods. Three possibilities for this study emerged.

- The quantitative (reliability of portfolios as determined by ICC) would take precedent, making the qualitative (explanations offered by the raters) secondary
- The qualitative would be primary, thus prioritizing the narrative provided by raters, then using the quantitative data to support the emerging themes

- The two would be equal in priority and blended together.

The researcher decided that utilizing the narrative to understand and explain the results of intra-class correlation would provide a more thorough answer to the research question. As such, the researcher used the first possibility previously listed (Figure 2.1). Tashakkori and Teddle (1998) suggested that a pragmatist considered the research question to drive the decision regarding importance of quantitative/qualitative in a mixed-methods study, while others tended to allow the research method to drive the priority. Oppenheim suggests the following:

> It would be more helpful to suggest that choosing the best design or the best method is a matter of appropriateness. No single approach is always or necessarily superior, it all depends on what we need to find out and on the type of question to which we seek an answer. (1992, p. 12)



Concurrent Nested Strategy showing primary quantitative research with qualitative research explaining it, on the basis of Creswell (2003). Adapted from "Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, 2nd Ed." p. 214. Copyright 2003 by SAGE Publications.

Figure 2.1 Concurrent Nested Strategy

Onwuegbuzie and Leech (2005) identified several advantages of pragmatic research. They proposed that qualitative research might be used to "inform the quantitative portion of research studies, and vice versa" (2005, p. 383). They also approached research data from a macro or micro lens, thus seeing both the big picture and the detail (Onwuegbuzie & Leech, 2005). Perhaps most relevant to this study was the following observation, "Because the pragmatic researchers utilize mixed methodologies within the same inquiry, they are able to delve further into a dataset to understand its meaning and to use one method to verify findings from the other method" (Onwuegbuzie & Leech, 2005, p. 384). By letting the research question drive the study, methods were chosen that provided the most real-world answer to an educational leadership question.

The research question, "Are portfolios reliable as evidence of mastery of the ISLLC standards and functions of students enrolled in an educational leadership specialist program when measured by intra-class correlation?" was not sufficiently answered to be especially significant to schools of Educational Leadership if only ICC findings were presented. Qualitative explanations provided a richer (Lincoln & Guba, 1985) insight into the use of portfolios as documentation of mastery of ISLLC standards. Therefore, the researcher sought feedback from raters as they evaluated each portfolio.

Population and Sample

Portfolios and Raters

The sample size of 30 portfolios was used in this study. All portfolios were from Education Specialist students at a mid-size university in the southeast region of the United States. The portfolios were submitted during two semesters by students from two

different cohorts. They covered a limited time span of four semesters, the duration of an Education Specialist program. These portfolios were developed during the coursework throughout the length of the Ed. S. program and turned in for a final perusal before the end of the last semester. When conducting an ICC statistical study with a limited number of samples, the researcher may increase the power of the study by increasing either the number of samples or the number of judges (Shoukri, Asyali, & Donner, 2004; Walter, Eliasziw, & Donner, 1996). Tochel et al., (2013) stated that when the number of raters was increased, reliability increased. A limited number of portfolios were available, and nine raters agreed to conduct the study. Therefore, each of 30 portfolios was reviewed by three judges who were randomly assigned from a pool of nine judges (Derham & Diperna, 2007, Gadbury-Amyot, Kim, Palm, Mills, Noble, & Overman, 2003; Shrout and Fleiss, 1979). Raters were recruited to participate in this study. Criteria were that they held advanced degrees in Educational Leadership or a related field (either Ed. S., Ed. D., or Ph. D.) and taught in an Educational Leadership department of a university, or they were school or district administrators with doctorates (Ed. D. or Ph. D.) in Educational Leadership. Appendix A contains the rater recruitment letter.

Instrumentation

The rating instrument was specifically designed for this study utilizing the ISLLC standards published in 2008 and the functions delineated and published in the Educational Leadership Policy Standards (ISLLC, 2008). A 6-point Likert scale was selected as the rating scale from 1 (no evidence), to 6 (exemplary evidence). A 6-point scale was chosen because optimum reliability occurs when a scale includes between four and seven response choices, with reliability increasing up until seven choices are given

(Croasmun & Ostrum, 2011). A study of the number of response options and reliability suggested that having a middle option could increase the variability of the scale (Lozano, Garcia-Cueto & Muniz, 2008), so having six response options was the choice of the researcher. Likert-type surveys were often utilized to study the strength of raters' beliefs on a categorical scale (Dittrich, Francis, Hatzinger, & Katzenbeisser, 2007). Appendix A is a copy of the rating instrument.

The six standards for school leaders studied using this rating scale and the performance indicators were as follows:

Standard 1—Shared Vision as described by performance indicators: (1.1) Collaboratively develop and implement a shared vision and mission; (1.2) Collect and use data to identify goals, assess organizational effectiveness, and promote organizational learning; (1.3) Create and implement plans to achieve goals; (1.4) Promote continuous and sustainable improvement; and (1.5) Monitor and evaluate progress and revise plans.

Standard 2—School Culture as described by performance indicators: (2.1) Nurture and sustain a culture of collaboration, trust, learning, and high expectations; (2.2) Create a comprehensive, rigorous, and coherent curricular plan; (2.3) Create a personalized and motivating learning environment for students; (2.4) Supervise instruction; (2.5) Develop assessment and accountability systems to monitor student progress; (2.6) Develop the instructional and leadership capacity of staff; (2.7) Maximize time spent on instruction; (2.8) Promote the use of the most effective and appropriate technologies to support teaching and learning; and (2.9) Monitor and evaluate the impact of the instructional program.

Standard 3—School Management as described by performance indicators: (3.1) Monitor and evaluate the management and operational systems; (3.2) Obtain, allocate, align, and efficiently utilize human, fiscal, and technological resources; (3.3) Promote and protect the welfare and safety of students and staff; (3.4) Develop the capacity for distributed leadership; and (3.5) Ensure teacher and organizational time is focused to support quality instruction and student learning.

Standard 4—Collaboration as described by performance indicators: (4.1) Collect and analyze data and information pertinent to the educational environment; (4.2) Promote understanding, appreciation, and use of the community's diverse cultural, social, and intellectual resources; (4.3) Build and sustain positive relationships with families and caregivers; and (4.4) Build and sustain productive relationships with community partners.

Standard 5—Educational Ethics as described by performance indicators: (5.1) Ensure a system of accountability for every student's academic and social success; (5.2) Model principles of self-awareness, reflective practice, transparency, and ethical behavior; (5.3) Safeguard the values of democracy, equity, and diversity; (5.4) Consider and evaluate the potential moral and legal consequences of decision making; and (5.5) Promote social justice and ensure that individual student needs inform all aspects of schooling.

Standard 6—Influence as described by performance indicators: (6.1) Advocate for children, families, and caregivers; (6.2) Act to influence local, district, state, and national decisions affecting student learning; and (6.3) Assess, analyze, and anticipate emerging trends and initiatives in order to adapt leadership strategies.

Validity

Validity of the rating instrument was established. Validity, according to Creswell (2005), is the degree to which a rating instrument measures what it was developed to measure, allowing inferences to be formed which are both meaningful and justifiable. A panel of experts reviewed the survey prior to its use. The panel included an expert in educational leadership who teaches leadership courses in a university, an experienced school principal who is familiar with the ISLLC standards, and a retired professor of Educational Leadership who had been involved in various capacities in school and district leadership as well. Validity for the qualitative component was substantiated by triangulation, member-checking, and rich, thick description (Creswell, 1998).

Data Collection Procedures

Upon approval by the university's Institutional Review Board (Appendix C), all potential participants were contacted personally by the principal investigator, either by phone, e-mail or personal visit. The participants voluntarily signed the Informed Consent Form (Appendix D). After the permission was obtained to utilize the archived portfolios (Appendix E), the portfolios were obtained and kept in a secure location for the duration of the research project. Each e-portfolio was coded by the primary investigator, who had been trained and certified in NIH protocol (Appendix F). All relevant personal information including name, school, title, grade level, and school district were removed from the electronic portfolios in order to ensure privacy of the students who authored them. Each participant was notified that they would receive no monetary gift for participation.

Several opportunities for training for raters were offered. Two face-to-face training sessions were offered, and an online training module was also available. All nine raters were trained utilizing the same PowerPoint presentation, and all nine raters were trained by the primary investigator. All nine raters were involved in teaching Educational Leadership classes or were actively involved in school-level leadership. The primary qualifications of the raters were familiarity with the ISLLC standards and holding an earned terminal degree in Educational Leadership, either Ph. D. or Ed. D. A randomizer from Microsoft Excel 2007 was used to assign numbers to raters. The randomizer assigned each portfolio a number. Then the same randomizer was used to assign each portfolio number to three raters, distributing the portfolios among the raters.

Item Analysis

Quantitative.

The quantitative portion of this study was developed around the work of Shrout and Fleiss (1979) which detailed proper use of intra-class correlation coefficients as a form of reliability study. Shrout and Fleiss proposed three distinct models for reliability studies, depending on the research design. First, each sample is rated by the same number of raters, randomly assigned from a field of raters. Second, each randomly selected rater evaluates all samples. Third, each sample is rated by all judges. The first model was an appropriate design for this study because a set of raters provided ratings on different sets of portfolios. These raters were randomly assigned. Shrout and Fleiss proposed different mathematical treatments of the three methods in order to ensure adequate reliability. Generalizability theory, the Rasch model, joint probability of agreement, Kohen's kappa

and Fleiss' kappa, Pearson's r and Spearman's p were all considered, but each one was found inferior to the intra-class correlation coefficient for this particular study. The generalizability theory would not take into account the stringency of the raters (Draney, 1995), while the Rasch model should be used to compare an item's difficulty with a person's ability (Bond & Fox, 2013). Joint probability of agreement did not consider the fact that variances between raters can happen by chance (Gwet, 2012; Shoukri, 2010). Cohen's kappa can only measure the variance between two raters, and this study had more than two raters (Posener, Sampson, Caplain, Ward & Cheney, 1990). Although the kappa coefficient can be used with more than two raters, it did not take into account differences due to chance (Cohen, 1960; Cohen, 1968; Fleiss et al., 1969). Pearson's r was limited to two raters, and Spearman's p simply rank-ordered data after Pearson's r had been computed (Field, 2009). In the end, the ICC model was chosen because the agreement between scores aimed to be examined (Field, 2009).

A similar reliability study was conducted in order to study reliability of portfolio assessment for dental hygiene students (Gadbury-Amyot et al., 2003). A total of 30 portfolios were reviewed and analyzed using a rubric with 35 items measured on a 4-point Likert scale. Seven faculty members rated each portfolio. The study associated with the project demonstrated that with only three faculty raters a high degree of reliability could be obtained.

Statistical tests were conducted using IBM's SPSS version 22. Data scores were entered at the function level and at the standard level. For example, standard one had five functions. In data set one (by function) each score was entered for individual functions. In data set two (by standard) the scores for all items were added and entered.

Prior to conducting the intra-class correlation of scores, assumptions for parametric statistics had to be met. For intra-class correlations, the statistical assumptions of a complete data set, outliers (z > |3.29|), and both univariate and multivariate normality were examined (measures of skewness and kurtosis > |1.0|). In addition, the Malanobis Distance was used to determine if multivariate outliers existed using X^2_{90} = 26.036, α = .001. In addition to normality, a final statistic was computed to determine if collinearity existed between the variables. This test was designed to ensure that variables were not measuring the same characteristic and that they were all necessary to the study. A common threshold of 10 for the variance inflation factor (VIF) was frequently found in the literature (Hair, Anderson, Tatham, & Black, 1995).

After assumptions were run and met, the final statistical test was the intra-class correlation, which showed how well different raters' scores agreed with each other. Scores near 1 exemplified perfect agreement, while scores closer to 0 revealed less agreement between raters. A two-way random model was selected because portfolios were randomly chosen and raters were randomly assigned to portfolios. Each of the 30 functions was assigned a Likert-type score between one and six. An intra-class correlation of 0.7 was considered the minimum acceptable standard, 0.8 as good, and 0.9 as excellent (Kirkegaard et al., 2006).

Qualitative.

Intra-class correlation gave the researcher numerical data, but in order to truly understand the process of rating portfolios, a qualitative method was chosen to enhance the richness of results, thus making this a mixed-methods study. The methodology behind

this mixed-methods project, as well as guidance for the qualitative component, was largely based on the work of Creswell (2003). As a qualitative researcher, several components of theory applied in addition to the quantitative theory. Ways to protect methodological integrity when performing qualitative research included limiting methods used and explaining steps of the research thoroughly (Fielding, 2010).

Synthesizing the methodology in a succinct manner (Creswell, 2003; Lincoln & Guba, 1985) helped the researcher finalize approaches. From several questions and charts, research decisions were listed below (Table 3.1). The research approach was mixed methods. Knowledge claims came from a pragmatic perspective. The researcher was seeking to solve a practical, real-world problem of the reliability of portfolios to assess students in an Educational Leadership Specialist program. The strategy of inquiry was a mixed-methods design, with closed-ended measures (ICC) and open-ended observations (written commentary from raters). The closed-ended measures, ratings from portfolios, were the quantitative piece of the study, while the open-ended request for rater observation was the qualitative segment of the study (Creswell, 2003).

Advantages and disadvantages of qualitative commentary from raters surfaced (Creswell, 2003). One advantage was being able to utilize the language of participants as the researcher included commentary in the study. By including rater expressions, the researcher was able to represent exactly what thoughts raters communicated in their writings. Raters could think about responses prior to writing them. Thoughtful responses were preferable to ideas given hurriedly. Additionally, the rater was able to work from written documents without a need to transcribe: Ideas did not get lost in transcription. However, disadvantages surfaced as well. Some raters did not respond with written

commentary. The possibility existed that the researcher could have misrepresented or misinterpreted the rater's thoughts.

Measures were taken to ensure validity of the qualitative portion of this study. The researcher triangulated data with literature as well as with the examples from the portfolio. Member-checking was utilized as well. The researcher approached raters with the final results and made sure the concepts and ideas raters were attempting to convey were captured in written narrative (Lincoln & Guba, 1985). The researcher sought inspection, clarification, and approval from the raters. Finally, narrative was written with thick, rich description in order to capture the complete essence of ideas being communicated (Creswell, 2003; Lincoln & Guba, 1985).

After ICC was run on numerical data, the researcher collected all rating sheets and divided them into two segments: those with commentary and those with no commentary. The commentary was then divided further into groups: commentary related to individual standards and functions and commentary related to the portfolios as a whole. All commentary was read holistically, but one rater emerged as the most detailed in comments. The researcher evaluated the commentary related to standards and functions initially and then evaluated the commentary relating to the portfolios as a whole. Those comments were grouped and coded as themes emerged. As the researcher read other raters' comments, they were grouped and coded with existing themes, but if new themes emerged, new groups were constructed. When all commentary was grouped and coded, rich, thick narrative was written that provided examples from the portfolios and also related back to the literature to triangulate the findings (Creswell, 2003; Lincoln & Guba, 1985). After the narrative was written, the researcher submitted it to the raters who had

provided commentary in order to ensure honest representation of what the raters intended to communicate was noted (Onwuegbuzie & Leach, 2005)

The researcher's role in the qualitative component of this study was that of observer. From a lens of pragmatism, the researcher wanted to assimilate practical information that would improve preparation of educational leaders. Her research background has prepared her for this undertaking. In her Master's degree program, she took several research classes, both quantitative and qualitative. Her Master's thesis examined the impact teachers have on grieving students through the use of qualitative analysis. In her Specialist studies, she participated in field research by conducting interviews with educational leaders for a broad study for Georgia Educational Leadership Faculty Association (GELFA). Additionally, her doctoral coursework included three advanced statistics courses as well as a qualitative course, and she has written a qualitative research proposal on Brain-Based learning. She has experience with coding and analyzing information in qualitative research and has obtained "A" marks in Statistical Analysis courses.

Regarding bias, the researcher was required to complete a portfolio when she undertook the Educational Leadership degree at the same mid-sized university in Southeast United States. She worked for many hours developing a portfolio, so she was intimately familiar with the assimilation of artifacts as evidence of mastery of ISLLC standards. She has participated in the portfolio process, even though the standards and functions have been refined since her coursework. Although some graduate schools offer courses that isolate qualitative and quantitative methodologies (Onwuegbuzie & Leech, 2005), this mid-sized university in Southeast United States has offered the opportunity to

study the benefits of mixed-method research as a component of a qualitative research course.

Summary

The methodology of this study was reviewed in detail in Chapter 3. The purpose of this two-phase sequential mixed-methods study was to answer two research questions. The first question, a quantitative one, was to what extent are portfolios reliable as evidence of mastery if the ISLLC standards and functions of students enrolled in an educational specialist leadership program when measured by intra-class correlation. The second question, the qualitative component, was why does consistency or inconsistency exist among the raters?

Portfolios from a mid-sized university in the southeastern United States (RSU) were evaluated to determine to what extent raters agreed on the quality of evidence they contained. Thirty randomly-selected portfolios from a pool of forty-two were chosen using Microsoft Excel 2007 randomizer. These portfolios were from students who had graduated in 2011 or 2012 from RSU's Education Leadership Specialist program. From a pool of nine raters, three raters were randomly assigned to evaluate these portfolios with a Likert-type scale of 1 (no evidence) to 6 (exemplary evidence) of mastery of each ISLLC function and standard. Subsequently, raters were asked to write commentary about how these portfolios could have been made better or why they were rated as they were. The raters were professors at RSU in the Education Leadership department or school leaders who had earned Ed. D. degrees or Ph. D. degrees in Education Leadership in the past five years.

Two instruments were used in this study. The first was a Likert-type rating scale for raters to select to what extent portfolios, along with their introductions and reflections, indicated mastery of ISLLC functions and standards. The second was an open-ended question: How could these portfolios be better indicators that the student had mastered ISLLC standards and functions? The rating scale was created by the primary investigator. The researcher listed each standard and function and listed numbers 1-6 beside each. After the instrument was created, it was reviewed by experts in the Education Leadership field to determine validity.

Raters received a packet with an IRB (Institutional Review Board) informed consent form (APPENDIX G), rating sheets, flash drives, and a copy of an instructional PowerPoint. Before the researcher explained the contents of the packets, raters were asked to sign the IRB consent forms, which the principal investigator immediately filed. The customized 8g flash drive included portfolios they were instructed to rate and the same instructional PowerPoint presentation. Rating sheets were explained to each person before they filled them out. Raters were asked to circle the number that best indicated to what extent the artifacts contained for each standard and function indicated student mastery. The electronic portfolios had been redacted by the principal investigator using Adobe Acrobat XI PDF maker. Additionally, each rater was instructed to comment on the portfolio quality and reasons portfolios were scored as they were. The principal investigator procured each packet when raters were finished with all portfolios. Two raters had to be given extra time; three finished early.

Upon receipt of the returned packets with grading sheets and flash drives, the principal investigator reviewed each one to determine if all pertinent materials were enclosed. The next chapter explained results from collected information.

CHAPTER IV

RESULTS

Introduction

The purpose of this chapter was to examine the inter-rater reliability results of portfolios submitted by students in an Education Specialist in Leadership course of study. The purpose of the study, research questions, and data collection process were reviewed. Data from tested assumptions and an analysis of intra-class correlation data were presented. Qualitative data were collected, reviewed, coded, grouped, validated, and reported.

Purpose of Study

The researcher purposed to determine the reliability of portfolios as evidence of mastery of ISLLC standards and functions of students enrolled in an educational leadership program. Data were analyzed using intra-class correlation to determine the extent to which portfolio scores assigned by those with advanced degrees in educational leadership agreed with each other. From a pool of nine raters, each of thirty portfolios was evaluated by three raters to determine reliability. The raters assigned a Likert-type score of 1-6 for each item under each standard: 1 represented “no evidence,” 2 represented “insufficient evidence,” 3 represented “some evidence,” 4 represented “adequate evidence,” 5 represented “satisfactory evidence,” and 6 represented “exemplary evidence.” According to Norman (2010), data from a Likert scale could be

treated as ordinal data and therefore parametric statistics was an acceptable option when examining such data.

Additionally, those raters were asked to give commentary as to why ratings were given and ways to improve evidence of skill mastery. This rater commentary was considered narrative or written interview. The written narratives were coded and grouped to provide insight into the reliability of portfolios as documentation of leadership skill practice and mastery. The quantitative component of the study was designed to determine to what extent raters would evaluate portfolios similarly (Norman, 2010), and the qualitative element of the study was to offer explanation, justification, and rationalization to those scores (Miles & Huberman, 1984). The final objective was to gain useful, applicable understanding about utilization of portfolios as an instrument to determine mastery of ISLLC standards and functions.

Research Questions

To what extent were portfolios reliable as evidence of mastery of the ISLLC standards and functions of students enrolled in an educational leadership program when measured by intra-class correlation coefficient? Why does consistency or inconsistency exist among the raters?

Results

Quantitative Findings

The quantitative results answered the research question: to what extent were portfolios reliable as evidence of mastery of the ISLLC standards and functions of students enrolled in an educational leadership program when measured by intra-class

correlation coefficient? The intra-class correlation coefficient was used to answer this question. In this way, reliability of the instrument was determined. Prior to conducting the intra-class correlation of scores, assumptions for parametric statistics had to be met. For intra-class correlations, the statistical assumptions of a complete data set, outliers, and both univariate and multivariate normality were examined. Statistical tests were conducted using IBM's SPSS version 22. Data scores were entered at the item level and at the standard level. For example, standard one had five functions. In data set one (by functions) each score was entered for individual functions. In data set two (by standard) the scores for all functions for that standard were added and entered.

Assumptions

Preliminary tests showed that there were negligible missing data entries. Two raters did not score one item for two different standards. These items were not the same and they were not from the same standard. The first missing item was from standard 2, function 9 (portfolio 19), which states that leaders monitor and evaluate the impact of the instructional program. The second missing item was from standard 5, function 1, which instructs leaders to ensure a system of accountability for every student's academic and social success (portfolio 18). Determination of normal distribution of data was conducted through four analyses: standardized scores (z-scores), Skewness, Kurtosis, and Shapiro-Wilks (Table 4.1). These tests were important because elimination or transformation of non-normally distributed data can reduce Type I and Type II errors (Osborne, 2001). Standardized scores (z-scores) were examined for each item entered in order to determine univariate outliers. The acceptable level of z scores are $z \leq |3.29|$ (Tabachnick and

Fidell, 2007). In this study, all values were between -2.00189 < z < 2.29890 except one outlier, whose value was z = 3.50075. This value came from standard 2 function 8 and stated that effective leaders promote use of effective and appropriate technologies to support teaching and learning. The single outlier was determined to have a minimal effect on the data; therefore, it was left unaltered.

Skewness indicates how asymmetric a distribution is. Skewness values ranged from < |1| (Field, 2009). As the values approach or exceed |1|, violation of that assumption of normality has occurred. In this study, skewness values fell between -.508 < Sk < .638, so this indicated that the data is not skewed. Kurtosis examines how peaked or flat the distribution is. Acceptable kurtosis values were limited to those below |3.29| (Field, 2009), but those nearer to |1| would indicate a more normal distribution. Positive values are more peaked, while negative values are less peaked. Evaluation of kurtosis among the samples showed that only one value showed evidence of flatness, with values ranging from -1.605 < K < .025. The minimal departure for the kurtosis values provided was further evidence of a normal distribution. The final indicator of normality was examined using the Shapiro-Wilks test. This data was evaluated using a = .05 such that $p \geq .05$ and indicated a normal distribution. Six variables were found to be non-normally distributed (see Table 4.1), while the rest of the values were smaller. However, this test is sensitive to sample size. As such, when examining the data, a few departures from normality were found, but when looking at the evidence as a whole, the decision was made not to transform the data because departures were marginal.

Table 4.1 Normality Scores by Rated Function

ITEM	Skewness	Kurtosis	Shapiro-Wilks	ITEM	Skewness	Kurtosis	Shapiro-Wilks	ITEM	Skewness	Kurtosis	Shapiro-Wilks
R1S1*				R2S1				R3S1			
1	-.386	-.933	.026		.686	-.771	.000		.100	-.893	.066
2	-.508	-1.046	.003		.083	-1.164	.032		.151	-.557	.019
3	-.455	-1.055	.010		.391	-.930	.031		-.048	-.558	.071
4	-.426	-1.072	.004		.182	-1.221	.022		.302	-.557	.022
5	-.241	-1.410	.003		.360	-1.243	.003		.543	-.530	.019
R1S2				R2S2				R3S2			
1	-.*367*	-1.147	.004		.289	-.996	.026		-.505	-.833	.016
2	-.257	-1.261	.001		-.373	-1.323	.001		-.124	-.904	.106
3	-.253	-1.235	.009		.022	-1.470	.001		-.294	-.919	.016
4	.014	-1.171	.021		.003	-1.384	.004		-.066	-1.022	.030
5	-.294	-1.233	.006		.000	-1.146	.005		.155	-1.247	.008
6	-.200	-1.230	.013		.216	-.637	.034		-.057	-.840	.090
7	-.016	-1.373	.007		-.019	-1.437	.003		-.362	-.995	.001
8	.147	-1.528	.001		.169	-1.227	.006		-.463	-1.084	.002
9	-.*238*	-1.181	.017		-.099	-1.301	.008		.204	-.927	.042
R1S3				R2S3				R3S3			
1	.000	-1.360	.015		.016	-.982	.030		.098	-.897	.035
2	.049	-1.151	.016		.092	-.539	.081		.456	-.437	.023
3	.164	-1.259	.010		-.037	-.780	.008		.359	-1.092	.008
4	.303	-.1007	.003		.613	-.564	.005		.363	-1.119	.005
5	-.213	-1.344	.005		-.056	-1.088	.013		-.035	-1.464	.005

Table 4.1, (continued)

ITEM	Skewness	Kurtosis	Shapiro-Wilks	ITEM	Skewness	Kurtosis	Shapiro-Wilks	ITEM	Skewness	Kurtosis	Shapiro-Wilks
R1S4				R2S4				R3S4			
1	-.228	-1.482	.001		-.364	-.714	.045		.054	-1.011	.043
2	.064	-1.180	.017		.119	-1.474	.002		.009	-1.429	.002
3	.119	-1.415	.011		.130	-1.174	.012		-.148	-1.237	.010
4	.235	-1.228	.014		.294	-1.287	.003		.052	-.881	.081
R1S5				R2S5				R3S5			
1	.294	-1.525	.001		.022	-1.470	.001		-.020	-1.443	.009
2	-.105	-1.415	.003		-.242	-1.605	.000		-.321	-.824	.033
3	-.009	-1.573	.002		.366	-.672	.018		.015	-1.172	.012
4	-.241	-1.325	.005		.189	-1.065	.007		-.301	-1.525	.001
5	.140	-1.560	.003		-.008	-1.371	.003		-.056	-1.515	.003
R1S6				R2S6				R3S6			
1	.102	-1.126	.035		.494	.025	.002		-.160	-.871	.021
2	.457	-.933	.009		.548	-.803	.001		.094	-.667	.100
3	.171	-1.280	.014		.638	-.834	.000		-.265	-1.311	.002

*Note: Table is arranged according to rater, standard, and then item. For example: R1S2 means rater 1, standard 2, and R2S5 means rater 2, standard 5. Item numbers denote standard descriptors.

In addition to univariate normality, evidence of multivariate outliers was examined to determine if normality existed for the multivariate case using the Malanobis Distance estimate. The results revealed that there were no multivariate outliers using $\chi^2_{90} = 26.036$, $\alpha = .001$. All χ^2 values were less than this threshold. This indicates that multivariate outliers were not present.

A final statistic was computed to determine if collinearity existed between the variables. This test was designed to ensure that variables are not measuring the same characteristic and that they are all necessary to the study. Finally, multicollinearity was examined using the Variance Inflation Factor (VIF). The VIF values in this study were well below the threshold of 10, varying between 1.284 as a lower value and 5.308 as an upward value, with only one variable falling above 5.000. This indicates that collinearity was not an issue for this data.

Intra-class correlation

The intra-class correlation examined the reliability of portfolio assessment and determined the agreement between raters' scores. As indicated in Table 4.2, none of the values showed a strong agreement between raters. The intra-class correlation coefficients ranged from -.257 to .626. Two functions nearly met the threshold for reliability. They were Function 2 from Standard 1 (ICC = .606) and Function 2 from Standard 6 (ICC = .626). The first function was to collect and use data to identify goals, assess organizational effectiveness, and promote organizational learning, and the second function was to model principles of self-awareness, reflective practice, transparency, and ethical behavior. Subsequently, reliability was evaluated at the standard level using a

two-way random intra-class correlation. The scores for functions for each standard were added and examined for reliability to ascertain if inter-rater reliability could be determined. The resulting data is shown in Table 4.3. The agreement between the raters for each standard overall did not reach the threshold of .7 as indicated by the range of ICC values from .105 to .521 in Table 4.3. Therefore, even by combining the functions in each standard, no agreement was obtained.

Qualitative Findings

Although the researcher found that no agreement existed among ratings in this reliability study, elements for consideration arose through the qualitative feedback provided by the raters. As a part of the data collection process, raters were asked to provide commentary that would give insight into the scores that were earned. In this discussion segment, quantitative and qualitative findings were woven together to provide a clearer representation of this study's merits.

Students were required to demonstrate mastery of each standard by providing at least one classroom artifact and one internship artifact per standard. Each artifact was to have an introduction which explained why the artifact was associated with a particular standard and situating the student within the artifact. Additionally, each artifact was to have a reflection which gave the student a chance to explain further thoughts and concerns. Placement of artifacts was left up to the Educational Leadership student. Each standard's artifacts were compared with a list of standards, and raters scored the artifacts, along with their introductions and reflections, 1 (no evidence), 2 (insufficient evidence), 3 (some evidence), 4 (adequate evidence), 5 (satisfactory evidence), or 6 (exemplary

evidence) for evidence of a student's mastery of the ISLLC standard. Table 4.4 summarizes the standards with sample classroom and internship artifacts.

Table 4.2 Intra-Class Correlation Coefficients by Function

	Average measures
Standard 1: Facilitating the development , articulation, implementation and stewardship of a vision of learning that is shared and supported by all stakeholders	
Collaboratively develop and implement a shared vision and mission	.185
Collect and use data to identify goals, assess organizational effectiveness, and promote organizational learning	.606
Create and implement plans to achieve goals	.430
Promote continuous and sustainable improvement	.532
Monitor and evaluate progress and revise plans	.418
Standard 2: Advocating, nurturing and sustaining a school culture and instructional program conducive to student learning and staff professional growth	
Nurture and sustain a culture of collaboration, trust, learning , and high expectation	.221
Create a comprehensive, rigorous and coherent curricular plan	.497
Create a personalized and motivating learning environment for students	.139
Supervise instruction	.118
Develop assessment and accountability systems to monitor student progress	.179
Develop the instructional and leadership capacity of staff	.493
Maximize time spent on quality instruction	.401
Promote use of effective and appropriate technologies to support teaching and learning	.380
Monitor and evaluate the impact of the instructional program	.312
Standard 3: Ensuring management of the organization, operations and resources for a safe, efficient, and effective learning environment	
Monitor and evaluate the management and operational systems	.489
Obtain, allocate, align, and efficiently utilize human, fiscal, and technological resources	.327
Promote and protect the welfare and safety of students and staff	.331
Develop the capacity for distributed leadership	.388
Ensure teacher and organizational time is focused to support quality instruction and student learning	.463
Standard 4: Collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources	
Collect and analyze data and information pertinent to the educational environment	.500
Promote understanding, appreciation and use of the community's diverse cultural, social and intellectual resources	.470
Build and sustain positive relationships with families and caregivers	.518
Build and sustain positive relationships with community partners	.559
Standard 5: Acting with integrity, fairness, and in an ethical manner	
Ensure a sustem of accountability for every student's academic and social success	.135
Model principles of self-awareness, reflective practice, transparency, and ethical behavior	.626
Safeguard the values of democracy, equity and diversity	-.257
Consider and evaluate the potential moral and legal consequences of decision-making	.072
Promote social justice and ensure that individual student needs inform all aspects of school learning	-.002
Standard 6: Understanding, responding to, and influencing the political, social, economic, legal and cultural context	
Advocate for children, families, and caregivers	.359
Act to influence local, district, state, and national decision affecting student learning	.389

	Average measures
Assess, analyze, and anticipate emerging trends and initiatives in order to adapt leadership strategies	.196

Table 4.3 Intra-Class Correlation Coefficients by Standard

	Average measures ICC
Standard 1: Facilitating the development , articulation, implementation and stewardship of a vision of learning that is shared and supported by all stakeholders	.329
Standard 2: Advocating, nurturing and sustaining a school culture and instructional program conducive to student learning and staff professional growth	.324
Standard 3 Ensuring management of the organization, operations and resources for a safe, efficient, and effective learning environment	.442
Standard 4: Collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources	.521
Standard 5: Acting with integrity, fairness, and in an ethical manner	.105
Standard 6: Understanding, responding to, and influencing the political, social, economic, legal and cultural context	.208

Table 4.4 Standards with Related Artifacts

Standard 1: An education leader promotes the success of every student by facilitating the development, articulation, implementation and stewardship of a vision of learning that is shared and supported by all stakeholders.

Collaboratively develop and implement a shared vision and mission
Collect and use data to identify goals, assess organizational effectiveness, and promote organizational learning
Create and implement plans to achieve goals
Promote continuous and sustainable improvement
Monitor and evaluate progress and revise plans

Coursework	Internship
CCRPI transition/overview	School Improvement Plan/School Improvement team (vision, plan, minutes, agenda)
Strategic/school/system improvement essay	Student recognition
Budget strategic plan	Student transition (8^{th} to 9^{th})- camp/brochure/
Mission statement description/procedures	Transition to CCGPS, Course test (math, history)
School improvement plan (Virtual/Mock)	School program guide (comprehensive)
Student survey	Teacher observation (peer, ewalk)
Assessment essay	Meeting agenda/weekly planner
Curriculum audit	Summer school calendar, Board minutes
Leadership styles	School Leader interviews

Standard 2: An education leader promotes the success of every student by advocating, nurturing and sustaining a school culture and instructional program conducive to student learning and staff professional growth.

Nurture and sustain a culture of collaboration, trust, learning, and high expectations
Create a comprehensive, rigorous, and coherent curricular plan
Create a personalized and motivating learning environment for students
Supervise instruction, Develop assessment and accountability systems to monitor student progress
Develop the instructional and leadership capacity of staff, Maximize time spent on quality instruction
Promote the use of the most effective and appropriate technologies to support teaching and learning
Monitor and evaluate the impact of the instructional program

Coursework	Internship
Curriculum alignment project	Standards based classroom- checklist (&/or Ewalk), strategies, Curriculum audit/tools
Curriculum audit/development	Student support/recognition (ICU, young men of distinction, AP night, senior day
Change essay	Faculty training/support (content, coteaching, peer-to peer observation, Thoughtful Literacy, "Classworks" implementation, Literacy, R4 committee meeting, curriculum maps, minutes from training)
Strategic plan for CCRPI implementation	Agenda- weekly planning/coach's meeting/PTO/CCRPI/
GPS to CCRPI essay	
School improvement plan, Balanced scorecard	
Scenario responses, Data alignment	

Standard 3: An education leader promotes the success of every student by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment.

Monitor and evaluate the management and operational systems
Obtain, allocate, align, and efficiently utilize human, fiscal, and technological resources
Promote and protect the welfare and safety of students and staff, Develop the capacity for distributed leadership
Ensure teacher and organizational time is focused to support quality instruction and student learning

Table 4.4, continued

Coursework	Internship
School Equity research paper Social media research paper Budget/Accounting process School Improvement plan data Mentoring plan of action	Schedule (tutoring, hall duty, block) Tutoring Form (transportation request , tutoring, extended day tutoring, letter to parent) Grant/application, Student course catalog, Edmodo Policy manuals/documents (Title 1, attendance, new teacher, safety), ewalk data, PLC facilitation Memo/Agenda (data analysis, mentor, athletic budget)
Standard 4: An education leader promotes the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources. Collect and analyze data and information pertinent to the educational environment Promote understanding, appreciation, and use of the community's diverse cultural, social and intellectual resources Build and sustain positive relationships with families and caregivers Build and sustain productive relationships with community partners	
Coursework	Internship
Data (analysis)- chart or essay Strategic/Action/Improvement plan Professional Learning Communities Presentation feedback form ESSAY- CCRPI, diversity, collaboration Curriculum audit	Agenda/minutes (study group, school council, Business advisory board, weekly news) Notifications (Hybrid Bell schedule, open house, Deficiency notice, Benchmark analysis protocol, AdvancED, differentiation brochure, newsletter, communication website) Student celebrations (Senior, 9th orientation, reward) Contract- credit recovery Presentation (Title 1, 7th grade class meeting, planning briefs for test prep related to SIP goals) Photo of nursing home visit, Open house sign in End of year survey, EOCT score comparison
Standard 5: An education leader promotes the success of every student by acting with integrity, fairness, and in an ethical manner. Ensure a system of accountability for every student's academic and social success Model principles of self-awareness, reflective practice, transparency, and ethical behavior Safeguard the values of democracy, equity, and diversity Consider and evaluate the potential moral and legal consequences of decision-making Promote social justice and ensure that individual student needs inform all aspects of schooling	
Coursework	Internship
School law assignment Dispositions/self inventory Research paper or proposal- NCLB, Academic performance related to PE, school violence, Methodology section of research plan, interactive whiteboards, teens with behavior disorders, relationship of freedom of speech/school law Role of principal essay Ethnography ppt Data analysis Action plan	Testing instructions/procedures Agenda/Invitation/Minutes (coach's meeting, school council minutes, District Advisory Task force) Expectations (Honor code, class rules, handbook, parent letter, code of ethics, Teacher of the Year recommendation Evaluation- self inventory, observation, parent survey, assessment rubric, Data disaggregation/at risk file Teacher Keys training/evaluation/feedback RTI training document, Club sponsor roster Study Hall Intervention Program development

Table 4.4, continued

Standard 6: An education leader promotes the success of every student by understanding, responding to, and influencing the political, social, economic, legal and cultural context. Advocate for children, families, and caregivers Act to influence local, district, state, and national decisions affecting student learning Assess, analyze, and anticipate emerging trends and initiatives in order to adapt leadership strategies	
Coursework	Internship
School law assignment Dispositions/self inventory Research paper or proposal- NCLB, Academic performance related to PE, school violence, Methodology section of research plan, interactive whiteboards, teens with behavior disorders, relationship of freedom of speech/school law Role of principal essay Ethnography ppt, Data analysis, Action plan	Minutes (board meeting, Education Excellence Foundation, school council, discipline committee, Agenda (Conference, stakeholder, PIE program, board meeting, DOE drive-by, new report card committee, Data Dig), Presentation (Parent involvement) Reports (monthly enrollment, parent involvement, tribunal statement, press release, comprehensive ELA action plan-SIP, survey results, newsletter) Sign in sheet (TKES training), Survey (Staff, student, parent)

Feedback from raters (Table 4.5) was classified into five categories: Weak, Confusing or Unclear, Misplaced or Incorrectly Aligned, Incomplete, and Implied. Comments were coded as Weak when the evidence was listed as a poor choice or not a good example. Commentary was coded as Confusing or Unclear when several raters offered conflicting commentary or when they labeled it as confusing or unclear. Commentary was coded as Misplaced or Incorrectly Aligned when raters labeled them with those terms. Items coded as Incomplete were either labeled as incomplete or a synonym for that term. When raters identified items as implied they were coded and placed in that category descriptor.

Weak.

The most widespread comments were themed around weak artifacts. A representative overarching comment from Rater 5 was, “Although some of the artifacts might pertain to the standards, a meeting or event announcement is not sufficient

evidence of mastery of all of the functions under that specific standard." One example of a gap between raters with Standard 1 was Portfolio 5, which presented a school improvement plan. The standard included developing and implementing a shared vision and mission, collecting and utilizing data to assess organizational effectiveness, creating and implementing a plan to achieve goals, promoting continuous and sustainable improvement, and monitoring and evaluating progress and revising plans accordingly. The composite scores for Standard 1 were 5, 8, and 20. The commentary from the low rater (Rater 1) included "no evidence of collaboration or implementation, data was not provided to identify goals" and "strategies were weak, no real plans for implementation, and nothing provided to monitor, evaluate or revise." That particular rater (Rater 1) provided a rationale for scores. Rater 2, who scored all functions in the 4 (adequate), did not provide justification or a rationale for scores given. Under Standard 1, Portfolio 3's SAR (team mission statement) as a classroom artifact was mentioned by Rater 8 as "inadequate" with composite scores of 8, 13, and 13. Some discrepancy in scores was evident with this example.

Also categorized in the weak group were several examples with Standard 2. This standard related to advocating, nurturing and sustaining a school culture and instructional program conducive to student learning and staff professional growth. One of the greatest discrepancies in scores, with composite scores of 11, 35, and 45 was in Portfolio 15. It contained a PowerPoint presentation on how to conduct a curriculum audit (classroom) and a school vision statement (internship). The low ratings were earned, according to Rater 3, because "artifacts were weak in those components addressed and did not provide evidence of several components of the standard." Minutes from a coach's meeting

(Portfolio 6 - scores 14, 28, and 49) as well as a timesheet of internship tasks (Portfolio 7 - scores 33, 44, and 45) were both listed as “poor choices” from Rater 6 for Standard 2. Rater 3 scored those artifacts at a composite level of 49 and did not provide commentary.

Standard 3 dealt with monitoring and evaluating the management and operations, proper use of school resources, safety, leadership development, and guarding instructional time. Rater 3 gave commentary that “an athletic budget is a poor choice of evidence.” In Portfolio 5 (scores 9, 18, and 20), the internship artifact was a curriculum audit. The portfolio had no classroom artifact for this standard. The low rater (Rater 9) noted that the “curriculum audit addresses some of the components but does not provided extensive enough examples to show mastery.” “School map” also received a comment of “poor choice” for Rater 9 Standard 3, even though the student linked the map to school safety, which was one of the functions in Standard 3. Portfolio 24’s Standard 3 received this remark from Rater 7, “The only artifact provided was a list of eight ways that a school has raised money.” Portfolio 24, Standard 3 received scores of 5, 5, and 6 from the three raters, which was a closer score than most. Portfolio 26, Standard 3 (composite scores 11, 19, and 24) included a comment from Rater 7, “Fiscal is only one part of managing and operating a school.” Many students chose to include budgeting as the only focus on Standard 3, but it also focused on using human and technological resources, developing others in the building for leadership roles, and guarding instructional time.

Standard 4, which addressed collaborating with parents and community leaders, responding to diversity within the community, and mobilizing community resources received this feedback from Rater 2, “NAH!” This artifact, from Portfolio 5, was a presentation feedback form (scores 4, 7, and 8). The student imbedded a one-page

evaluation, with no commentary, with Standard 4, that addressed collaboration with faculty and community members to respond to diverse community interests and needs and mobilization of community resources. Another example of weak artifacts in Standard 4 was a photocopy of a page on standards from an Advance-ED booklet in Portfolio 6 (composite scores 6, 12, and 21) as an internship artifact and a research paper on how to improve teacher assessment scores for the classroom artifact. Rater 8, who scored the portfolio the lowest, provided the following note, "The artifacts did not address the larger aspects of the standard (community). Additionally, a copy of standards is NOT an adequate artifact. It shows no understanding or mastery by the student." Rater 8 clearly indicated that the presented artifact was insufficient.

Examples of weakness, according to some raters, were revealed in Standard 5. This standard included acting with integrity, fairness and in an ethical manner, with accountability, democracy, equity, diversity, moral and legal judgment, and consequences, and social high scorer, Rater 1, justice. Portfolio 9 presented a disposition evaluation (classroom) and performance data (internship) as its evidence. Portfolio 9's composite scores (14, 15, and 25) on the five functions were not sufficient for some evaluators. Rater 7 noted, "I'm not sure that the classroom artifacts of disposition evaluations are sufficient. These characteristics should be shown in the public school setting (rather than the college classroom.) Additionally, I do not think the performance data alone supports the standard." Rater 7 (lowest scorer) gave scores ranging from 1 (insufficient) to 4 (adequate) on the five functions under that standard, while Rater 1, the high scorer, marked all the functions as 5 (satisfactory). Rater 7 also commented that a set of class rules under Standard 5 (internship) was "not a good example of the standard."

Another example of a "weak" artifact in Standard 5 was a disposition evaluation. Rater 1 said, "A disposition is useful for a student, not so useful in evaluating standard mastery." Portfolio 17's artifacts, an ethnography research PowerPoint and a set of classroom rules, were considered ineffective. Comments from rater 7 included, "Neither artifact was effective for this standard. Much more information would be needed to show mastery." This portfolio received composite scores of 10, 14, and 21 for Standard 5. Rater 7 scored all five functions at a level of 2 (insufficient), while Rater 4 scored all level 4 (adequate). The discrepancy between scores revealed a great disconnect between raters. In fact, the low score came from a school district leader, and the high score was a professor in the Educational Leadership program from which the student had graduated.

Weak artifacts were found in Standard 6 as well. Standard 6 addressed the larger social context of education by suggesting that educational leaders serve as advocates for children and their education at local, district, state, and national levels, and anticipate future educational trends in order to adapt leadership strategies. One artifact was an agenda from conference participation in Portfolio 26 (composite scores 8, 9, and 15). Rater 7 noted, "While conference participation is good, it does not demonstrate active leadership." Rater 7 scored all functions as 3 (some evidence) while Rater 1 scored all functions as 5 (significant). Raters did not agree to what extent the artifact demonstrated standard mastery. Board meeting minutes were presented as the internship artifact in Portfolio 9. Scores given were 1 (no evidence) for all functions from Rater 1, to 4 (adequate evidence) for all functions from Rater 2. Rater 1 remarked, "While attending board meetings is part of the job, attendance does not demonstrate active understanding. Reflection is needed to tie it all together." Rater 1 saw board meetings as not providing

evidence of standard mastery, while Rater 2 saw board meetings as enough evidence that student had mastered the standard. Another educational leadership student provided the classroom school law assignment paired with a board meeting agenda. Rater 7 responded,

> The artifacts did not represent the standard. The classroom artifact was basically a question and answer assignment about the legal system. Although the standard does say "legal," I do not believe that the characteristics of the legal system are what the standard is trying to address. Additionally, a copy of a board meeting agenda does not reflect the standard without additional commentary on how the topics discussed relate to the standard.

The range in scores Portfolio 6 ranged from 1 (no evidence) for most functions from Rater 7 to 6 (satisfactory or exemplary) for most functions from Rater 3. Artifacts included a school board meeting's minutes and a copy of the group school law test. No agreement between raters was evident in the scoring of Portfolio 6 artifacts.

Weak artifacts drew the most commentary from raters. Examples from an array of portfolios demonstrated the vast differences in opinions of the raters about the extent to which artifacts, along with their introductions and conclusions, furnished evidence of mastery of ISLLC standards and functions. However, weak evidence was not the only type that raters submitted as cause for investigation.

Confusing or unclear.

The next theme of commentary from raters is confusing or unclear. This category included artifacts that were identified as confusing to the raters, or raters indicated they were unclear why the artifacts were in a particular category. Several artifacts labeled as confusing or unclear were identified in Standard 4. Standard 4 dealt with "collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources." A function of Standard 4 was "collect and

analyze data and information pertinent to the educational environment." Several students placed CRCT, EOCT, GHSGT, and other testing data with this standard, but raters noted that students did not provide clear information on how that data related to stakeholder and community diversity. Portfolio 26 was one example. The author presented a data set of EOCT test data. Rater 7 scored each function with 3 (some evidence), but the Raters 1 and 5 marked composite scores 15 and 20, with one rater scoring all functions 5 (satisfactory), indicating that the EOCT data was enough evidence of that student's mastery.

Misplaced or incorrectly aligned.

Misplaced or Incorrectly Aligned artifacts were those that were not listed with the correct standard, according to the raters. In the set of Portfolio 9's scores of 11, 16, and 20, Rater 7 observed, "Neither artifact really hit the main aspect of developing and implementing a vision. The artifacts were more about strategies. The internship artifact (action plan for community involvement) might have been better aligned with Standard 4 on improving community communication." The classroom artifact was a strategic plan, which had been developed as a group project. Portfolio 17 had a gap of 28 points between its high and low composite score for Standard 2 (18, 34, 46), and Rater 7 commented, "A letter asking you to serve as mentor teacher demonstrates no mastery of Standard 2." In Portfolio 5, Standard 3's composite scores were 9, 18, and 20. An observation from Rater 1 was, "The School Improvement Plan provided focused on academic performance which is not the focus of Standard 3. This artifact would have been more appropriate for Standard 2." Another comment from Rater 1 was about the "disconnect between the artifact submitted and the standard" (Standard 4). The artifact

was dealing with testing data, but the standard dealt with educational environment and mobilizing community resources. Rater 5 commented, “Just because the word ‘data’ appears in the standard does not mean test data is relevant.” Another misplaced or incorrectly aligned artifact was noted by Rater 5, who evaluated Portfolio 6 (composite scores 5, 7, and 16). The comments on Standard 6 by Rater 5 were, “The only artifacts provided dealt with law, ethics and discipline. The standard relates to understanding, responding to, and influencing the political, social, economic, legal and cultural context.” Portfolio 5 had a range of 3 to 10 in its composite scores of Standard 6. Commentary from Rater 7 provided on one of the two scores of 3, “An artifact answering questions about law cases from class does not address the meaning of the standard to ‘advocate, act, assess, analyze, and anticipate.’” Those raters did not agree on the evaluation of the available artifacts.

Incomplete.

The Incomplete theme presented examples of standards that were not fully addressed, and were placed in the category labeled Incomplete. Portfolio 5, Standard 1 had an example of this type of variation in composite scores, with a range between 5 and 21. Rater 1, whose composite score of the artifacts was 6, said, “Artifacts were missing although the reflection mentioned additional artifacts.” The artifact that was available was a copy of the school’s vision statement and beliefs, but it was in a TIFF image, so it is possible that some raters may not have been able to access it or may not have known how to open an image of that type. Introductions and reflections were available. Portfolio 15 (total comprehensive scores 52, 115, and 149) included several instances from Rater 8 with specific components receiving a score of 1 (no evidence), while other components

were scored 4's and 5's (adequate and satisfactory), while the Rater 3 marked scores of all 4's and 5's (adequate and satisfactory). Rater 8, who indicated the low scores, noted that evidence was missing on specific functions. It is unclear if the other Raters 2 and 3 looked for those specific functions, or viewed the artifacts for the standards in a more global manner.

Implied.

The next theme, Implied, mentioned that certain functions were implied but not expressly stated under particular functions and were placed in the category labeled "Implied". This was evident with Standard 1 on multiple portfolios. The vision cycle, presented in Standard 1, has five functions. When just a school improvement plan or vision was presented, even when it had an introduction and reflection, raters noticed that the single artifact did not address all five functions within the standard. Some commentaries from Rater 7 were, "role with vision statement was implied," "SIP information was clear and concise, reflection was linked to a participant's role, but follow-through was implied," and "monitor and evaluate was implied by process employed for planning." These were common comments from Rater 7 regarding this standard. Some raters elected to give students credit for the implied function mastery with scores of 4, 5, or 6 on the same portfolio. Other raters elected to score a 1 when there was no specific evidence given and mentioned in the introduction or reflection.

Another example of a glaring gap in scores pertained to Standard 2, "advocating, nurturing and sustaining a school culture and instructional program conducive to student learning and staff professional growth." The artifacts presented for Portfolio 17 were a group curriculum project (classroom) and a school curriculum audit (internship). The

raters' composite scores on Portfolio 17 were 18, 34, and 46. Rater 7, who scored the composite as 18, noted that under "maximize time spent on quality instruction" the comment was, "this was not addressed" and scored the implied functions as 1. The other raters (Raters 1 and 4) scored the implied functions a 3 and a 4, resulting in scores that did not relate to each other well.

An example of credit given by some raters for implied information was in Standard 5, integrity, fairness and in an ethical manner. The three raters' composite scores on Portfolio 17 were 9, 10, and 21. Raters 1 and 4 gave credit for components of the artifact that were not explicitly stated, while Rater 7 noted, "The artifacts focused on the first component of the standard, but there was little to nothing on the other components." This large discrepancy was an illustration of how scores varied so greatly.

Table 4.5 Results from Rater Commentary on Functions

Theme	Sample comment(s)
Weak Number of Occurrences 44	Letter asking you to serve as mentor teacher demonstrates no mastery of standards.(S2P17R1) Class rules not a good example (S5P9R1) Conference participation is good but does not demonstrate active leadership. (S6P7R1) While attending board meetings is part of the job, attendance does not demonstrate active understanding- no reflection included to tie it all together. (S6P9R1) Much more information would be needed to show mastery. (S5P17R7) Disposition useful for student. Not so useful in evaluating standards. (S5P9R1) Law paper and board agenda did not demonstrate standard 6 (S6P11R5) The only artifact provided - a list of 8 ways that a school has raised money. (S3P24R7) The parent survey is not a true indicator if only 14 participants respond. (S6P25R5) The classroom artifact initially indicated that they had developed a theme, but later referred to it as the mission. Both the classroom and internship artifacts were the same. (S1P3R5) School law assignment was not totally accurate. The internship assignment was only a portion of the board minutes. (S4P3R5) Artifact was an essay on the candidate's leadership style which does not translate into a plan or any action based on data and needs (S1P24R7)
Confusing or Unclear Number of Occurrences 19	Role with vision was implied but not clear. (S1P5R1) Student implied role but did not document. (S2P21R1)
Misplaced or Incorrectly Aligned Number of Occurrences 27	Disconnect between artifact submitted and standard (S4P5R1) Curriculum review, coach's meeting agenda really didn't reinforce standard 2 (S2P11R1) PowerPoint was about leadership functions more than nurturing and sustaining a school culture or instructional program (S2P6R5) Artifacts represent school improvement as it relates to test scores, not building or fostering community relationships (S4P6R5) Not sure Honor's Night fits here. (S1P22R5) The student had a great overview of CCRPI and great pictures of classrooms, but these artifacts did not fit the standard. (S1P27R5) Code of ethics video and school law paper do not demonstrate the student's ability to do it. (S5P27R5) The classroom artifact was a budget project that focused on receiving and expending money. This is a limited view of budgeting and only one component of the standard. The internship artifact would have been more aligned with Standard 2. (S3P22R7) The classroom artifact was the same for Standards 2 & 3 (P19R5) The internship artifact really did not address the standard (S3P3R5) I am not sure what a statement regarding an incident at school had to do with this standard. (S6P8R5)

Theme	Sample comment(s)
Incomplete Number of Occurrences 71	Class assignment – NO SIP outside of school vision? (S1P18R5) Would have been a 5, but did not explain any differentiation (S2P18R1) CCRPI paper, agenda- incomplete- no planning, no vision and mission (S1P11R5) Duty roster and athletic budget did not ensure teacher time is focused to support quality instruction (S3P11R5) Did not see a classroom artifact (S2P25R5) Very good artifacts; however, there was no mention of plan revision(S1P16R5) The internship artifact was incomplete, therefore, the ratings I gave may be lower than they could have been if I had a complete picture. (S2P3R5) Goals were written but no plans to achieve them (S1P8R5) Few, if any, artifacts touched on human and technological resources.(S3, general, R7)

Table 4.5 continued

Theme	Sample comment(s)
Implied Number of Occurrences 12	Role- implied follow through lost 2 points. Monitor and evaluate (S1) process implied by process employed for planning. Much is implied by student's role at school. Not clearly stated in reflection.
Other Number of Occurrences 8	The student had great artifacts of what the school was doing but nothing that the student created (S2P27R5) Unable to open the link for classroom artifact (S5P3R5)

General Portfolio Comments

Reflections.

Finally, some raters provided general comments about the quality of artifacts and how they viewed the overall portfolio. Four raters (Raters 1, 5, 7, and 9) mentioned that portfolios with better introductions and reflections earned more points because the work the intern had done was clearer. An example comment from Rater 9 on Portfolio 30 was, "No rationale for why artifacts were included. No introduction or reflection. (It was) just a series of reports with some original work by the student." Portfolio 30 received comprehensive scores of 56, 59, and 96 from a possible 177 points. Rater 1's commentary on Portfolio 5 was, "All reflections were weak and are generally only summaries of what was included as an artifact-little thought was given to leadership role/responsibility in relation to artifacts." Portfolio 5's comprehensive scores were 43,

77, and 55. Commentary that Rater 1 provided on Portfolio 7 (comprehensive scores 51, 130, and 148) indicated that the reflections were "generally weak and did not provide that deep level of self-awareness you would hope to see. (The portfolio) could have been strengthened by including information about what was most useful, what would be more beneficial, next time, etc." Sample commentary which raters gave about portfolios in general is shown in Table 4.6, and positive commentary is shown in Table 4.7.

Table 4.6 General Commentary on Portfolios (Holistic)

Category	Sample Commentary
Weak	Many artifacts were generic and not related to the student or the student's ability. Elements were all included but not much depth. Student had great artifacts but nothing that showed the student's ability to initate, collaborate, or master the 6 standards. (P27R5)
Confusing or Unclear	Some artifacts were a little confusing. Standards 5 & 6 could have interchanged. Not sure of personal role in strategic plan, mostly theoretical. Collaborating with a team on the test but not sure if (he) had a leadership role.
Incomplete	Most of the standards would require numerous artifacts to show mastery. 1-2 artifacts for each is not enough because few artifacts would touch on all aspects of a standard unless it was a very detailed and comprehensive list.
Other	Community is the most difficult piece to document-sensitivity to needs of parents can be inferred to community at large, particularly in a small district. (S4P9R1) Difficult to open links, but I saw some attached artifacts. (P21 R5) Several grammatical errors. Did not use past tense when student should have. (S2P14R5)

Table 4.7 Positive Commentary

Category	Sample commentary
Organization	Thoughtful and well-organized portfolio.(P3R3) Much easier to evaluate when documents are clearly labeled and grouped. (P1R9) So far I have reviewed 6 portfolios. This one was very informative, easy to move through, and very organized. (P19R5)
Artifacts	Overall good artifacts (R2P2) Powerpoint gave clear understanding of aspects of curriculum(S2P7R1) Curriculum review good indicator of understanding(2P9R1) Stronger standard because followed system plan (S3P5R1) Data analysis with follow-up presentation demonstrates good understanding of how it all fits together in schools. (S3P7R1) School law assignment showed comprehensive understanding of legal issues (S6P7R1) I liked the data talks with students (S4P18R5) Very good classroom artifact- school improvement plan (S1P6R1) Good internship artifact (S1P25R5)

Category	Sample commentary
	Good artifacts. The artifacts enhanced each other. (S2P8R5) Good rubric. Also, it was good to have one of your personal evaluations as an artifact. (S5P8R5)
Reflections	A well-written reflection-that is truly reflective in nature-does much to enhance demonstration of concepts. Artifacts are not sufficient. (R1, general) Self-evaluation reflected understanding of how personal beliefs influence choices in regard to ethical, etc. (S5P7R1) Reflection gives validity to self-evaluation documents (S5P9R1)
Clarity	SIP information was clear and concise. (S1P7R1) Intro clearly states leadership role in relation to artifact (S4P7R1)

On the other hand, Rater 1 noted regarding Portfolio 26, "Well-written reflections, truly reflective in nature, make it easy to recognize that the candidate has internalized and applied course learning." Portfolio comprehensive scores were 85, 116, and 177 for Portfolio 26. Portfolio 9 also received positive commentary about the strength of the portfolio. Rater 7 said, "Well-written reflections support the artifacts and truly demonstrate an understanding of key leadership skills – next time I will…" However, the positive commentary did not narrow the gap between comprehensive scores. The scores were 83, 91, and 144 and did not demonstrate consistency in the way raters scored the portfolio artifacts.

Organization.

Another general theme surrounded the idea of organization. Two raters commented on Portfolio 10's lack of organization. Rater 1 noted, "Organization - or lack thereof - made it impossible to determine what was intended to represent which standard. I could not locate introductions or reflections. I cannot justify assigning any category a score higher than 2." Rater 4 just scrawled, "Poorly organized…" and rated all categories 1. Comprehensive scores were 31, 62, and 62. Raters had either given all categories 1 point (no evidence) or 2 points (insufficient evidence) for Portfolio 10. Portfolio 12 also

received commentary about lack of organization. Rater 5 remarked, “This portfolio was difficult to follow because of organization – (I) was finally able to locate all the artifacts.” The comprehensive scores earned for Portfolio 12 were 100, 124, and 152. Organization was an area that affected how portfolios were rated.

Observations.

A final group of commentaries that were noted were grouped as observations. These were stand-alone comments that were reported by raters, although perhaps they were only mentioned once. One such comment about Portfolio 5 from Rater 9 (comprehensive scores 55, 77, and 95) was that the portfolio "seemed hastily assembled to meet minimum portfolio requirements." Another comment (Portfolio 12, comprehensive scores 100, 124, and 152) was from Rater 1, "Dispositions are not a strong tool to evaluate standards." Portfolio 16 (comprehensive scores 73, 104, and 145) received this remark from Rater 5, "Meeting agendas do not demonstrate proficiency." Although these comments were given only once, they did provide insight as to the way raters viewed artifacts with their introductions and reflections.

Summary

Weak artifacts, confusing or unclear artifacts, misplaced or incorrectly aligned artifacts, incomplete artifacts, and implied artifacts contributed to discrepancies in scores earned by participants in the Educational Leadership Specialist program at RSU. Poor reflections lowered scores portfolios earned. Some raters gave credit for characteristics while others did not. A number of raters gave full credit for all functions in a standard if some of the functions were met, while other raters gave credit only for functions which were explicitly represented. Raters also lacked agreement regarding quality of particular artifacts. All of these issues led to poor consensus among the raters of these portfolios.

CHAPTER V

SUMMARY, CONCLUSION, AND FUTURE STUDIES

Summary

This researcher sought to determine the extent to which electronic portfolios were evidence of mastery of the ISLLC standards and functions of students enrolled in an educational leadership program when evaluated by intra-class correlation (Creswell, 2008; Creswell, Plano Clark, Gutmann, & Hanson, 2003; Tashakkori & Teddie, 1998) and qualitative data (Lincoln & Guba, 1985) provided by the raters. The two-phase sequential mixed-methods model (Creswell, 2003) was used to determine if any agreement existed between rater scores (quantitative) and the rationale for scores given (qualitative). The study was limited to the use of thirty portfolios from students who had completed an Educational Leadership specialist program at a mid-sized university in the southeastern United States. Raters were individuals who were involved in the Educational Leadership department of this university and school district leaders who had earned doctoral degrees in Educational Leadership. Each portfolio was evaluated three times by different individuals. Thirty portfolios were randomly selected from a group of 42 available electronic portfolios. Then, the portfolios were randomly assigned to the raters.

Raters received copies of redacted electronic portfolios via flash drives prepared by the principal investigator. After signing IRB and confidentiality documents, raters were given 3-4 weeks to rate between 6 and 10 portfolios. Raters evaluated classroom and internship artifacts, along with their introductions and reflections, on a 6-point Likert-type scale, with the scale being 1=no evidence, 2=insufficient evidence, 3= some

evidence, 4=adequate evidence, 5=satisfactory evidence and 6=exemplary evidence (Dittrich, Francis, Hatzinger, & Katzenbeisser, 2007). These rating scores provided quantitative evidence of performance-based activities that educational leaders are expected to know how to do, according to the ISSLC standards and functions. Some raters evaluated more than the initial ten because some expected raters decided not to participate in the study. Raters were also asked to give feedback as to which artifacts offered more evidence of standard mastery and why. This feedback provided qualitative information which was used to give additional insight to the quantitative findings (Lincoln & Guba, 1985).

After receiving data from all raters, the principal investigator conducted tests to determine normality of data. The two missing scores were deemed negligible. Standardized scores (z-scores), skewness, kurtosis, and Shapiro-Wilks were analyzed in order to determine if the data needed to be eliminated or transformed in order to reduce Type I and Type II errors. Acceptable scores on all tests revealed no need to eliminate or transform data (Field, 2009).

After determining normality, intra-class correlation was conducted on the scores to determine how well different raters' scores agreed that artifacts demonstrated mastery of ISLLC functions. An intra-class correlation score of 0.7 was considered to be the minimum acceptable score, 0.8 was considered good, and 0.9 was considered excellent (Kirkegaard et al., 2006). None of the values showed strong agreement. The intra-class correlation ranged from -.257 to .626. This suggested that no strong agreement was found. A subsequent intra-class correlation was performed at the standard level, and the

agreement failed to meet the threshold of .7 as indicated by the range of ICC values from .105 to .521.

The qualitative data was then coded and evaluated to determine if an explanation could be found. Five themes emerged from the comments offered by raters regarding the artifacts: weak, confusing/unclear, misplaced/incorrectly aligned, incomplete, and implied. When a more in-depth evaluation was conducted, each of these themes revealed discrepancies between raters about the earned scores. For example, in the Weak category, Portfolio 6, Standard 2 received composite scores of 11, 35, and 45 of a possible 54 points. The artifacts were a copy of a PowerPoint about how to conduct a curriculum audit and a copy of a school's vision statement. Raters did not agree about the level at which those artifacts demonstrated to what extent the candidate could perform the ISLLC tasks and functions listed under Standard 2. Several examples were provided for each theme.

Analysis of Research Findings

Although no evidence of agreement among raters was found, several explanations emerged about the reasons for poor consensus among the raters. Some students included artifacts which were weak, confusing or unclear, misplaced or incorrectly aligned, incomplete, or implied. Additionally, some portfolios were so poorly organized that a few raters did not even try to score them. Lack of agreement among the raters of these portfolios was caused by one or a combination of several of these conditions.

Discussion of Research Findings

Some of the findings of this study compared positively with prior research, while other components of the literature were not seen in the results. Researchers studying dental portfolio reliability determined that portfolios could serve as a valid and reliable measure for assessing student competencies (Gadbury-Amyot, 2003). However, this present study did not result in quantitative data that confirmed the reliability of portfolios as assessment instruments of performance-based tasks. Some raters in this study indicated that scores were low because of missing elements relating to the standards, which corroborated information from Hackman and Alsbury (2005). The results were described as revealing a lack of essential curriculum content in portfolios. Raters in this study mentioned missing and unclear evidence of mastery, which coincided with Hackman and Alsbury's results of missing information relating to the standards. Therefore evidence in this study corroborated at least two of the Hackman and Alsbury findings, missing evidence and unclear evidence.

On the other hand, Militello et al. (2009) suggested that principals found internship experiences helpful in their preparation as school leaders; no research with this study confirmed that report. However, another concept in the Militello study stated that skills which leaders practiced must meet expectations held for them. The Militello finding was confirmed in the present study from some of the commentary from the raters. Several raters in this study commented on the poor quality of the artifacts collected. Some artifacts with their reflections did not meet expectations of the raters of those particular portfolios.

Artifact reflections were mentioned by the raters as being both enlightening and ineffective. Quite a few comments from raters (1, 4, 7, & 9) indicated that reflections were helpful for understanding how the candidates participated in the activity that produced the artifacts. Rater 1 also stated that poor reflections did not help raters understand how well the student understood how the artifacts and standards were related. This finding was supported by Hackman and Alsbury (2005). The researchers noted an absence of essential curriculum content being mentioned in reflections. When students did not relate artifacts and standards together well in reflections, evidence that students had mastered essential curriculum components was not provided.

When students' reflections were well-developed, they revealed what students knew and showed student's understanding of how theoretical classwork and practical application in leadership settings worked together (Turns et al., 2010). Evidence in this study affirmed that finding. Rater 1 noted that well-written reflections show an understanding of how key leadership skills connect to theory. Rater 1 was seeking evidence of transformational leadership, which was not evident in many of the portfolios. Rater 1 stated that the weak reflections did not provide a "deep level of self-awareness you would hope to see" in a transformational leader. These findings were consistent with Castelli's (2011) research, which suggested that reflection is essential to practicing transformational leadership. When students included a reflection which connected artifacts with corresponding theory or theories, raters were able to give higher scores.

A final existing research piece was upheld by findings in this study. Hadley (2007) utilized portfolio forums to assist students in creating stronger reflections and in relating a proper balance between technical electronic portfolios and the learning process

which was foundational to utilization of technical skills. Complementary to that finding was Rater 1's note that Portfolio 5's reflections were merely summaries and descriptions of the artifacts and that little thought was given to how the artifacts related to leadership roles and responsibilities. Strong leadership portfolio reflections were not simply descriptions of artifacts. They contained philosophical underpinnings which related to leadership theory and the individual demonstrating related skills and functions.

Practical implications emerged from the qualitative synopses provided. In some cases, weak artifacts were presented that provided some evidence of understanding and mastery of ISLLC standards, but raters disagreed to what extent individuals provided evidence of their understanding. In other cases, raters noted confusing or unclear artifacts. For example, one rater noted that just because a standard utilized the word "data" in it, not all data applied. Students provided CRCT, EOCT, GHSGT, and other testing data as evidence of collecting and analyzing data about a community and its resources. Because of the wide range of scores earned on those artifacts, perhaps some of the raters themselves did not understand the ISLLC standards and functions to the extent necessary to perform a reliable rating.

Raters also mentioned other concerns regarding portfolios. These included weak reflections and poor organization of the portfolios. Reflections were important because they indicated self-awareness and situated the student within the artifact practice (Brody, Vissa & Weathers, 2010; Drago-Severson et al., 2012; Hackman & Alsbury, 2005; Lazaridou, 2009; Senge, 1999; Wildy & Wallace, 1998; Zimmerman, 2011). Some of the raters suggested that students did not provide thoughtful reflections for the artifacts. Several researchers suggested that portfolios lost part of their instructional value if

reflection of student learning was not provided. Raters pointed out that they marked poor scores on portfolios which were more disorganized.

Possible improvements to utilizing electronic portfolios in an Educational Leadership Specialist program to provide evidence of mastery of ISLLC standards might be to engage school districts in conversation about what type of evidence might be more useful in determining to what extent an educational leader is ready to lead schools (Fry, Bottoms, & O'Neil, 2005). Additionally, extensive student training on creation, selection, introduction, and reflection of artifacts might lead to decreased confusion for the raters resulting in a more reliable instrument.

Conclusion

No evidence was found to suggest that portfolios were the best way to demonstrate knowledge. Although the ratings of the 30 electronic did not reveal enough agreement to consider them reliable as evidence of mastery of ISLLC standards, perhaps more important knowledge was gained from the qualitative data which needs to be addressed. From a pragmatic perspective (Onwuegbuzie & Leech, 2005; Tashakkori & Teddle, 1998), the researcher sought to determine to what extent portfolios were a reliable assessment to examine the mastery of ISLLC standards for those enrolled in an Educational Leadership Specialist program. The researcher drew various conclusions from this research project. First, students who participated in performance-based programs which required a portfolio to document the action component needed to be well-trained on the purpose of the portfolio and how to create its components. Second, students enrolled in the Ed. S. Leadership program needed to internalize the importance of reflection, as it is a practice which will assist them in creating a high-quality portfolio.

Third, extensive rater training and practice is essential to reliably scoring educational leadership portfolios. If 90% of colleges and universities utilize portfolios in some manner in their educational leadership programs, extensive research is essential to know how to utilize these portfolios in the most effective manner possible. If universities are going to continue to utilize performance-based tasks to prepare future educational leaders, and if the electronic portfolio is going to continue to be the tool with which performance data is collected and measured, then higher standards must be developed and maintained in order to fulfill the spirit of performance-based initiatives.

Implications

Several groups of people were identified which would benefit from results of this study. Instructional leaders of the Educational Specialist program at RSU may benefit from informing participants of the philosophy, intent, importance, components, and scoring of the portfolio. Instructors can work with students until they master the skill of reflection, which will help them construct stronger portfolios, but reflective practice will also make the students stronger educational leaders. Other universities which utilize reflective electronic portfolios for documentation of ISLLC standards and functions will be able to build stronger programs in the same manner as RSU if they develop reflective practice among their educational leadership students. Additionally, students enrolled in RSU's Educational Specialist in Leadership program will benefit because they could see usefulness in the portfolio process. This process involves thoughtfully selecting artifacts and reflecting on how they relate to theoretical underpinnings as well as practical implementation. Ultimately, elementary, middle, and high school students will benefit from having stronger, more reflective leaders.

Recommendations

Several potential research topics are suggested in relation to future studies relating to reliability of portfolios in Ed. S. Leadership programs. Reliability was not found in the quantitative evaluations performed by these raters on the 30 Education Specialist portfolios that were evaluated. However, this does not mean that portfolios have no place in an educational specialist training program, and it does not mean that portfolios will never be a reliable form of providing mastery of ISLLC standards and functions. The following is a suggestion for future research projects:

1. Compare the rating system of Educational Leadership Specialist portfolios of other mid-size universities.
2. Conduct a similar research project using just three raters from the Educational Leadership Specialist department, and have all raters evaluate 30 portfolios. Prior to evaluation, conduct extensive training and preliminary practice ratings until consensus is reached about quality of the practice portfolios.
3. Replicate this study with two district leadership personnel and two professors of Educational Leadership rating 30 portfolios (with practice ratings prior to the actual study). Of interest to the researcher is whether or not educational leaders in schools and professors in universities rate portfolios similarly. It would be informative to compare the ways school district leadership and those who teach educational leadership programs view artifacts as evidence of standards mastery.
4. Survey suggestions from school district leadership as to what evidence educational leadership candidates might provide to demonstrate proficiency of

the leader standards and functions could provide ideas and examples of helpful internship tasks.

5. Conduct a pre- and post-training evaluation on scoring of artifacts with extensive training on how to write reflections. This would inform the general public about the importance of reflection in assembling a portfolio and would also inform educational leadership candidates about the importance of reflection as an educational leader.
6. Conduct a confirmatory factor analysis on the portfolio scores with student GPA's, GRE scores, portfolio scores, and leadership evaluations might offer insight to reliability.
7. Conduct a replication study, but instead of having descriptors for the rating scale, state the endpoint numbers and allow raters to place a mark along the continuum at any point. Lack of specific descriptors might allow different variability discovered in this study.

If this researcher duplicates this study, several changes will be considered. All students involved in the Ed. S. Leadership program will receive adequate preliminary training on how to create initial artifacts, integrate the artifacts with standards, introduce each artifact adequately, and write reflections which indicate depth of knowledge of theory and practice expected of an educational leader. These components of portfolios will be formed together in class until student mastery is obtained. Adequate time will be spent training students how to write exemplary reflections. All raters will receive consistent and uniform training, working together on sample data until agreement on the sample data can be achieved, which will potentially lead to more agreement on actual

portfolios. Professors in the education specialist leadership department will determine if portfolios will be rated on a standard level or a function level, and then they will clearly communicate that information to students as well as raters.

Dissemination

Results from this research will be sent to the Georgia Educational Research Association to be reviewed for the October conference. This association encourages presentation of research findings by new and experienced researchers. The American Educational Research Association, the largest research conference in the United States, is another research organization which will receive these discoveries. Additionally, the findings will be sent to the Journal of Research on Leadership Education for possible publication. This journal focuses on educational leadership training and research on leadership preparation pedagogy. Readers of this journal might be interested in creating stronger portfolios through the development of the reflective process.

Concluding Thoughts

As the researcher reflects on the two years of study and investigation, the question which begs an answer is, “so what?” In the end, what did the researcher really find? The most frequent train of thought emerges: If policy makers and those in charge really believe that performance-based leadership training is the most effective way to prepare educational leaders, and if designers of leadership specialist programs are truly committed to the development of strong, reflective educational leaders, then results from this study suggest that policy makers and program developers have much to accomplish. It is imperative for those who develop educational leadership specialist programs to

determine if and how portfolios are to be used and to express those criteria clearly to educational leadership specialist students, as well as to the raters who will be evaluating the portfolios. It is incumbent upon those in positions of leadership to develop reflective leaders by modeling and teaching reflective practice. Adequate feedback must be given to expand the Ed. S. Leadership students' visions for schools and districts. Most of all, Ed. S. students must be coached to the point that practicing ISLLC leadership performance standards are second nature.

In conclusion, here is a final thought. This poem was written by Robert D. Abrahams in 1938 about events in Asia as World War II was beginning. The last stanza speaks of apathy, and educators are sometimes prone to get tired and even apathetic.

Tonight Shanghai is burning,
And we are dying too.
What bomb more surely mortal
Than death inside of you?

For some men die by shrapnel,
And some go down in flames,
But most men perish inch by inch,
In play at little games.

No part of instructional leadership should be a "little" game played with our thoughts, energy, time, or money. If the solution to developing excellent educational leaders is by using performance-based portfolios, the portfolios must be created with a purpose and product in mind, and must be perfect. All too often flash drives and compact discs are submitted and wind up in a drawer in some cabinet without being evaluated for evidence of mastery. Without feedback from instructional leaders, how can educational specialist students master ISLLC performance standards? After all, what is important is

that educational leadership faculties prepare quality school leaders who perform with distinction.

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APPENDIX A

RATER RECRUITMENT LETTER

Dear (name of potential rater),

This mid-size university in Southeast United States' Ed. S. program utilizes the electronic portfolio as documentation of mastery of the ISLLC Leader Standards in its performance-based program. As a doctoral candidate in this Educational Leadership program, my dissertation is an inter-rater reliability study on the use of portfolios as performance indicators. This study will involve 30 portfolios being rated three times each. I am recruiting ten raters (each will rate nine randomly- assigned portfolios). The time requirements will be as follows:

1. One hour training program – (offered at three different times; you choose the one training session most convenient for you) - Snacks and door prizes will be included. Door prizes include gift cards to various restaurants and places of business, a cell phone, a hard drive, and similar tokens of appreciation.

2. Rate nine portfolios- delivered via flash drive- Each should take between one and two hours to rate, according to preliminary trials completed by the principal investigator. These should be rated within a three week window of time, to be determined by the principal investigator. Rating sheets have 31 items to be rated on a 6-point Likert-type scale.

3. Return flash drives and rating sheets to the principal investigator.

In order to protect your privacy, all evaluations will go directly to me, the principal investigator. Links between evaluators (raters) and evaluations will be protected from others.

Thank you for assisting in this research endeavor, which I believe will broaden existing research on the utilization of portfolios as performance mastery indicators. I look forward to hearing a positive response from you via email at bowen_cynthia1@xxxxxxstate.edu.

Sincerely,

Cindy Bowen

APPENDIX B

RATING INSTRUMENTS

ISLLC Leader Standards Rating Rubric Portfolio # _____

Instructions: For each leader standard function, circle the point value that best describes how the portfolio demonstrates performance indicators given. Use the following scale.

	No evidence	The function is not addressed.
	Insufficient evidence	Minimum evidence is given to support mastery of the function.
	Some Evidence	Some evidence is given to support mastery of the function.
	Adequate Evidence	Reasonable evidence is given to support mastery of the function
	Satisfactory evidence	Significant evidence is given to support mastery of the function.
	Exemplary evidence	Specific, extensive evidence is shown to support mastery of the function.

Leader Standard I

An education leader promotes the success of every student by facilitating the development, articulation, implementation and stewardship of a vision of learning that is shared and supported by all stakeholders.

The portfolio demonstrates student's ability to	No	Insufficient	Some	Adequate	Satisfactory	Exemplary
Collaboratively develop and implement a shared vision and mission						
Collect and use data to identify goals, assess organizational effectiveness, and promote organizational learning						
Create and implement plans to achieve goals						
Promote continuous and sustainable improvement						
Monitor and evaluate progress and revise plans						

Leader Standard 2

An education leader promotes the success of every student by advocating, nurturing and sustaining a school culture and instructional program conducive to student learning and staff professional growth.

The portfolio demonstrates student's ability to	No	Insufficient	Some	Adequate	Satisfactory	Exemplary
Nurture and sustain a culture of collaboration, trust, learning, and high expectations						
Create a comprehensive, rigorous, and coherent curricular plan						
Create a personalized and motivating learning environment for students						
Supervise instruction						
Develop assessment and accountability systems to monitor student progress						
Develop the instructional and leadership capacity of staff						
Maximize time spent on quality instruction						
Promote the use of the most effective and appropriate technologies to support teaching and learning						
Monitor and evaluate the impact of the instructional program						

Leader Standard 3

An education leader promotes the success of every student by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment.

The portfolio demonstrates student's ability to	No evidence	Insufficient Evidence	Some Evidence	Adequate Evidence	Satisfactory Evidence	Exemplary Evidence
Monitor and evaluate the management and operational systems						
Obtain, allocate, align, and efficiently utilize human, fiscal, and technological resources						
Promote and protect the welfare and safety of students and staff						
Develop the capacity for distributed leadership						
Ensure teacher and organizational time is focused to support quality instruction and student learning						

Leader Standard 4

An education leader promotes the success of every student by collaborating with faculty and community members, responding to diverse community interests and needs, and mobilizing community resources.

The portfolio demonstrates student's ability to	No	Insufficient	Some	Adequate	Satisfactory	Exemplary
Collect and analyze data and information pertinent to the educational environment						
Promote understanding, appreciation, and use of the community's diverse cultural, social and intellectual resources						
Build and sustain positive relationships with families and caregivers						
Build and sustain productive relationships with community partners						

Leader Standard 5

An education leader promotes the success of every student by acting with integrity, fairness, and in an ethical manner.

The portfolio demonstrates student's ability to	No	Insufficient	Some	Adequate	Satisfactory	Exemplary
Ensure a system of accountability for every student's academic and social success						
Model principles of self-awareness, reflective practice, transparency, and ethical						

The portfolio demonstrates student's ability to	No	Insufficient	Some	Adequate	Satisfactory	Exemplary
behavior						
Safeguard the values of democracy, equity, and diversity						
Consider and evaluate the potential moral and legal consequences of decision-making						
Promote social justice and ensure that individual student needs inform all aspects of schooling						

Leader Standard 6

An education leader promotes the success of every student by understanding, responding to, and influencing the political, social, economic, legal and cultural context.

The portfolio demonstrates student's ability to	No	Insufficient	Some	Adequate	Satisfactory	Exemplary
Advocate for children, families, and caregivers						
Act to influence local, district, state, and national decisions affecting student learning						
Assess, analyze, and anticipate emerging trends and initiatives in order to adapt leadership strategies						

Artifact Summary

Directions: Mark the artifacts you see as you are rating portfolios. Please give feedback that would assist in making the portfolio artifacts effective indicators of mastery of ISLLC standards.

Standard	Classroom	Commentary	Internship	Commentary
Standard 1	CCRPI transition/overview Strategic/school/system improvement essay Budget strategic plan Mission statement description/procedures School improvement plan (Virtual/Mock) Student survey Assessment essay Curriculum audit Leadership styles		School Improvement Plan/School Improvement team (vision, plan, minutes, agenda) Student recognition Student transition (8^{th} to 9^{th})- camp/brochure/ Transition to CCGPS Course test (math, history) School program guide (comprehensive) Teacher observation (peer, ewalk) Meeting agenda/weekly planner Summer school calendar Board minutes School Leader interviews	
Standard 2	Curriculum alignment project Curriculum audit/development Change essay Strategic plan for CCRPI implementation GPS to CCRPI essay School improvement plan Balanced scorecard Scenario responses Data alignment		Standards based classroom- checklist (&/or Ewalk), strategies Student support/recognition (ICU, young men of distinction, AP night, senior day Faculty training/support (content, coteaching, peer-to peer observation, Thoughtful Literacy, "Classworks" implementation, Literacy, R4 committee meeting, curriculum maps, minutes from training) Agenda- weekly planning/coach's meeting/PTO/CCRPI/ Curriculum audit/tools	
Standard 3	School Equity research paper Social media research paper Budget/Accounting process School Improvement plan data Mentoring plan of action		Schedule (tutoring, hall duty, block, Tutoring Form (transportation request , tutoring, extended day tutoring, letter to parent) Grant/application Student course catalog Edmodo staff development Policy manuals/documents (Title 1, attendance, new teacher, school safety) Memo/Agenda (data analysis, mentor, athletic budget, ewalk data, PLC facilitation) Presentation (SIP, Budget, etc.)	

Standard	Classroom	Commentary	Internship	Commentary
Standard 4	Data (analysis)- chart or essay Strategic/Action/Improvement plan Professional Learning Communities Presentation feedback form ESSAY- CCRPI, diversity, collaboration Curriculum audit		Agenda/minutes (study group, school council, Business advisory board, weekly news) Notifications (Hybrid Bell schedule, open house, Deficiency notice, Benchmark analysis protocol, AdvancED, differentiation brochure, newsletter, communication website) Student celebrations (Senior, 9th orientation, reward) Contract- credit recovery Presentation (Title 1, 7th grade class meeting, planning briefs for test prep related to SIP goals) Photo of nursing home visit Open house sign in End of year survey EOCT score comparison	
Standard 5	School law assignment Dispositions/self inventory Research paper or proposal- NCLB, Academic performance related to PE, school violence, Methodology section of research plan, interactive whiteboards, teens with behavior disorders, relationship of freedom of speech/school law Role of principal essay Ethnography ppt Data analysis Action plan		Testing instructions/procedures Agenda/Invitation/Minutes (coach's meeting, school council minutes, District Advisory Task force) Expectations (Honor code, class rules, handbook, parent letter, code of ethics, Teacher of the Year recommendation Evaluation- self inventory, observation, parent survey, assessment rubric Teacher Keys training/evaluation/feedback Data disaggregation/at risk file RTI training document Club sponsor roster Study Hall Intervention Program development	
Standard 6	School law assignment Dispositions/self inventory Research paper or proposal- NCLB, Academic performance related to PE, school violence, Methodology section of research plan, interactive whiteboards, teens with behavior disorders, relationship of freedom of speech/school law Role of principal essay Ethnography ppt Data analysis, Action plann		Minutes (board meeting, Education Excellence Foundation, school council, discipline committee, Agenda (Conference, stakeholder, PIE program, board meeting, DOE drive-by, new report card committee, Data Dig) Presentation (Parent involvement) Reports (monthly enrollment, parent involvement, tribunal statement, press release, comprehensive ELA action plan-SIP, survey results, newsletter) Sign in sheet (TKES training) Survey (Staff, student, parent)	

APPENDIX C

IRB APPROVAL

COLUMBUS STATE UNIVERSITY

Cindy Bowen <bowen_cynthia1@columbusstate.edu>

Protocol 13-069 Approval

2 messages

CSU IRB <irb@columbusstate.edu> Mon, Sep 16, 2013 at 6:42 PM
To: Cindy Bowen <bowen_cynthia1@columbusstate.edu>, Thomas McCormack <mccormack_thomas@columbusstate.edu>
Cc: CSU IRB <irb@columbusstate.edu>, HardinS@sfhga.com, Amber Dees <dees_amber@columbusstate.edu>, Clayton Nicks <nicks_clayton@columbusstate.edu>, David Schwimmer <schwimmer_david@columbusstate.edu>, Diana Riser <riser_diana@columbusstate.edu>, Ellen Roberts <roberts_ellen@columbusstate.edu>, Jeffrey Zuiderveen <Zuiderveen_jeffrey@columbusstate.edu>, "Jennifer L. Brown" <brown_jennifer2@columbusstate.edu>, Kimberly Shaw <shaw_kimberly@columbusstate.edu>, Michael Mangum <mangum_mike@columbusstate.edu>, Shamim Khan <khan_shamim@columbusstate.edu>, Steven Brown <brown_steven@columbusstate.edu>, Lawrence Dooley <dooley_larry@columbusstate.edu>, Michael Richardson <richardson_michael5@columbusstate.edu>, LaTonya Santo <santo_latonya@columbusstate.edu>

Institutional Review Board

Columbus State University

Date: 09/16/2013

Protocol Number: 13-069

Protocol Title: Reliability of the Portfolio for Measuring ISLLC Standard Mastery: An Intra-Class Correlation

Principal Investigator: Cynthia Bowen

Co-Principal Investigator: Thomas McCormack

Dear Cynthia Bowen:

Representatives of the Columbus State University Institutional Review Board have reviewed your research proposal identified above. It has been determined that the research project poses minimal risk to subjects and qualifies for expedited review under 45 CFR 46.110.

Approval is granted for one (1) year from the date of this letter for approximately 40 subjects. Please note any changes to the protocol must be submitted in writing to the IRB before implementing the change(s). Any adverse events, unexpected problems, and/or incidents that involve risks to participants and/or others must be reported to the Office of Academic Affairs at (706) 568-2061.

You must submit a Final Report Form to the IRB once the project is completed or within 12 months from the date of this letter. If the study extends beyond 1 year, you must submit a Project Continuation Form to the IRB. Both forms are located on the CSU IRB website (http://research.columbusstate.edu/irb/). The

completed form should be submitted to irb@columbusstate.edu. Please note that either the Principal Investigator or Co-Principal Investigator can complete and submit this form to the IRB.

If you have further questions, please feel free to contact the IRB.

Sincerely,

Amber Dees, IRB Coordinator

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Institutional Review Board
Columbus State University

APPENDIX D

LETTER OF INFORMED CONSENT

COLUMBUS STATE UNIVERSITY

INSTITUTIONAL REVIEW BOARD

Informed Consent Form

You are being asked to participate in a research project conducted by Cindy Bowen, a doctoral candidate in the College of Education and Health Professions at Columbus State University. Dr. Thomas McCormack is supervising this study.

I. Purpose:

The purpose of this project is to examine reliability of portfolios as evidence of mastery of ISLLC Standards in an Educational Leader Specialist Program.

II. Procedures:

1. You are being asked to rate electronic portfolios which were completed as a part of the Educationl Leadership Specialist program at Columbus State Univesity.
2. You will need to sign this informed consent waiver.
3. You will attend one of three training sessions for raters. These sessions will be offered at the CSU main campus and will last approximately 1 hour, but no more than 2 hours.
4. You will be randomly assigned nine portfolios which have had all identifying information removed.
5. During the open window of opportunity, you will rate nine (9) portfolios using the scoring rubric provided.
6. Each portfolio should take 1 hour to review, but no more than 2 hours. This time was estimated by computing the time taken to rate three different portfolios that were excluded from the study and averaging the time.
7. You will mark your ratings on the score sheet and submit them to the principal investigator no more than 3 weeks from the beginning of the study.

III. Possible Risks or Discomforts:

No risks perceived.

IV. Potential Benefits:

No benefits to the participants are expected, but universities and education programs which utilize e-portfolios to document mastery of ISLLC standards will benefit from understanding the reliability of e-portfolio utilization.

V. Costs and Compensation:

No compensation will be given to the participants. No costs will be incurred by the participants. Refreshments and door prizes will be provided at the training sessions.

VI. Confidentiality:

The e-portfolios will be coded and the codes will be secured on the laptop of the principal investigator. Additionally, a backup copy will be secured on a flash drive which

will be locked in the principal investigator's desk. All e-portfolios and coding information will be destroyed one year from the date of the dissertation's acceptance.

VII. Withdrawal:

Your participation in this research study is voluntary. You may withdraw from the study at any time, and your withdrawal will not involve penalty or loss of benefits.

For additional information about this research project, you may contact the Principal Investigator, Cindy Bowen, at 706-443-4073 or bowen_cynthia1@columbusstate.edu. If you have questions about your rights as a research participant, you may contact Columbus State University Institutional Review Board at irb@columbusstate.edu.

I have read this informed consent form. If I had any questions, they have been answered. By signing this form, I agree to participate in this research project.

_____ _____

Signature of Participant Date

APPENDIX E

ARCHIVED PORTFOLIO USAGE APPROVAL

June 25, 2013

To Whom It May Concern:

Cindy H. Bowen, a doctoral student in Columbu[redacted]nal Leadership program, has permission to use internship portfolios held in the archives as educational records in the Department of Educational Leadership for a study of their inter-rater reliability using intra-class correlation. I understand these compact disks will be uploaded to a secure, password-protected website and rated by individuals with experience with the ISLLC standards.

Sincerely,

Gary A. Sheroyce (name)

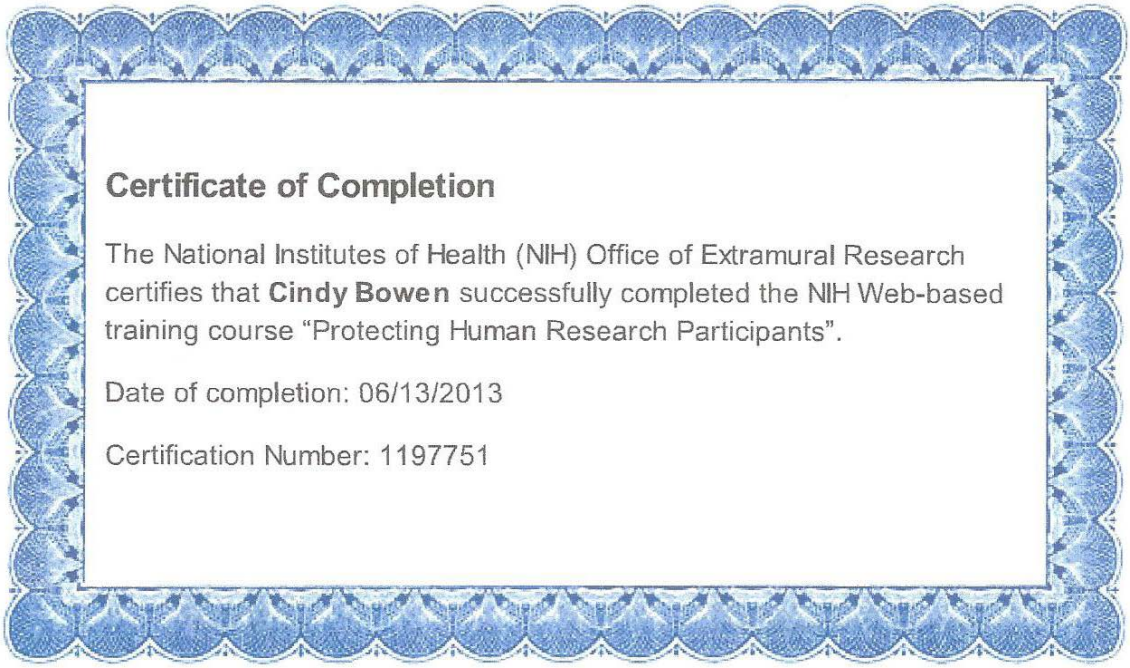
Program Coordinator (title)

6/25/2013 (date)

APPENDIX F

NIH TRAINING CERTIFICATION

Protecting Human Subject Research Participants



Certificate of Completion

The National Institutes of Health (NIH) Office of Extramural Research certifies that **Cindy Bowen** successfully completed the NIH Web-based training course "Protecting Human Research Participants".

Date of completion: 06/13/2013

Certification Number: 1197751